
Climate, Environment and Biodiversity Strategy 2025–2031

Document: EB 2025/144/R.13

Agenda: 5(b)

Date: 16 April 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](#).

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

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Executive summary

1. The Climate, Environment and Biodiversity Strategy 2025–2031 outlines IFAD’s comprehensive response to the interconnected threats facing small-scale farmers – climate impacts, environmental degradation and biodiversity loss – which endanger rural livelihoods and food security.
2. Extreme weather events, shifting seasons, temperature fluctuations, and the increasing frequency of droughts and floods disrupt crop cycles, reduce yields and drive up production costs, thus weakening rural economies. Soil erosion, water scarcity and pollution degrade essential land and water resources, threatening long-term sustainability. The loss of pollinators, soil microorganisms and beneficial species further harms crop health, productivity and livelihoods.
3. This strategy seeks to remove barriers to rural economic growth, highlights the rising costs of climate, environment and biodiversity challenges, and places rural people at the centre of solutions. At its core, it champions inclusive participation, ensuring that sustainable practices are shaped by and for those most affected by rural poverty and driven by country demand. It places a strong emphasis on women’s economic empowerment as a key lever for driving more resilient and equitable rural economies.
4. The strategy takes a nexus approach, acknowledging the interconnected nature of climatic, environmental and biological challenges with economic issues and the need for integrated solutions that maximize synergies for enhanced impact. It emphasizes the importance of combining climate adaptation and mitigation approaches, while linking environmental and biodiversity goals within agricultural development. Addressing the financing gap is crucial to scaling these initiatives, necessitating enabling policies, innovative finance mechanisms, coordinated investments, and capacity-building efforts to facilitate transformational food system change. In response to the increasing demand for resilient rural economies, the strategy will offer targeted support on the ground to small-scale producers, ensuring they have the necessary resources and capabilities to adapt to climate-, environment- and biodiversity-related challenges.
5. By investing in climate adaptation and mitigation, promoting climate-resilient and low-emission investments, mobilizing climate finance, and restoring and protecting the environment and biodiversity, IFAD aims to build resilience and foster sustainable agricultural practices for a more resilient future. To effectively operationalize this strategic vision, the strategy will be implemented through the following objectives:
 - (a) **Objective 1:** Enhance scaling and adoption of climate-resilient, environmental management and biodiversity-positive practices;
 - (b) **Objective 2:** Enable increased investments for climate resilience, environmental management and the protection of biodiversity; and
 - (c) **Objective 3:** Strengthen policy engagement, knowledge management, capacity development and innovation to enhance rural resilience.
6. IFAD will remain focused on delivering its climate finance target of allocating at least 45 per cent of its total programme of loans and grants to climate action, as committed under the Thirteenth Replenishment of IFAD’s Resources (IFAD13). This ambition goes hand in hand with a strong emphasis on enhancing the adaptive capacity of its target groups, ensuring rural communities are better equipped to respond to escalating climate shocks.
7. The strategy aligns with the IFAD Strategic Framework 2025–2031 and the IFAD13 Report, presenting a unified approach to overcoming barriers to climate resilience, environmental management and biodiversity loss. It reaffirms IFAD’s commitment to sustainable, inclusive rural transformation, equipping rural communities and small-scale producers to adapt and thrive in a changing world.

Climate, Environment and Biodiversity Strategy 2025–2031

I. Introduction

A. Background

1. **IFAD’s mandate focuses on transforming rural economies towards eliminating rural poverty and food insecurity.** Central to this is building the long-term economic resilience of small-scale farmers, enabling them to seize opportunities from rising demand for diverse, high-value agricultural and food products. However, these farmers are among the most vulnerable to climate and environmental shocks, facing land degradation, deforestation, biodiversity loss, water scarcity and extreme weather events.¹ These result in reduced yields and livelihood options and negatively impact rural economies. Throughout its history, IFAD has expanded financial flows to reverse productivity losses in response to these challenges. This strategy builds on that progress by embedding targeted approaches into IFAD’s operations to help rural communities and economies adapt to and thrive in the face of long-term threats.
2. **To achieve this, the strategy employs a nexus approach, acknowledging the interconnectedness of climate, environment and biodiversity challenges.** It recognizes approaches that address threats across these three domains as critical levers for reducing rural poverty and increasing food security, in line with IFAD’s mandate. By harnessing synergies and leveraging co-benefits across interventions in these domains, it aims to enable rural communities to be climate-resilient and sets their long-term development on a solid pathway through enhanced environmental management and biodiversity-positive practices.²
3. **These approaches are essential to address land degradation, water scarcity, increasingly variable and intense weather patterns, and declining agricultural productivity, all of which threaten the economic stability of rural systems by reducing incomes, job opportunities and food security.** The economic implications of environmental degradation are profound. For instance, the World Bank estimates³ that the collapse of ecosystem services provided by nature – such as wild pollination, provision of food from marine fisheries and timber from native forests – could result in a decline in global GDP of US\$2.7 trillion annually by 2030. The Dasgupta Report⁴ on the economics of biodiversity has found that human demands on nature exceed nature’s capacity to supply them, putting biodiversity under huge pressure and placing future generations at extreme risk of ecosystem collapse, and economic and social instability.
4. **These challenges – and their solutions – are deeply interconnected, requiring a holistic approach that boosts productivity, strengthens supply chains and stabilizes rural livelihoods.** While IFAD’s decades of progress demonstrate that environmental recovery is possible, scaling impact requires policy

¹ In the context of small-scale agriculture, extreme weather events refer to significant deviations from typical seasonal weather patterns that severely disrupt farming practices. These events include (i) intense periods of rainfall: leading to flooding, soil erosion and crop damage; (ii) prolonged dry spells: resulting in water scarcity, crop failure and livestock stress; (iii) unseasonable frosts or heatwaves: causing damage to crops at vulnerable growth stages; and (iv) strong winds and storms: destroying crops, damaging infrastructure and displacing topsoil.

² In the context of this strategy: (i) **Environmental management practices** are defined as the responsible stewardship of natural resources essential to rural livelihoods, including soil, water and air. It focuses on practices that protect or enhance the quality and health of these resources, enabling small-scale farmers to increase productivity, reduce input costs and build resilience against environmental shocks. (ii) **Biodiversity-positive practices** are defined as interventions that conserve, restore or sustainably use biodiversity, including the abundance and variety of genetic resources, species and ecosystems; they are prioritized when they create economic opportunities, enhance food security and nutrition, and strengthen the resilience of rural communities to environmental stresses.

³ World Bank. 2021. [Protecting nature could avert global economic losses of US\\$2.7 trillion per year.](#)

⁴ Dasgupta, Partha. 2021. [The Economics of Biodiversity: The Dasgupta Review.](#)

shifts, institutional change and financial innovation. Expanding resilient solutions, embedding sustainability in national strategies, and mobilizing public and private finance are key to systemic transformation. Action must go beyond projects to achieve long-term resilience, economic stability and global sustainability. This strategy underscores that climate, environment and biodiversity must be tackled together. Farm-level issues such as resource degradation and extreme weather are directly linked to rural livelihoods and must be addressed through integrated systemic solutions. Annex VI provides further details on the benefits of integrated approaches.

5. **Research highlights that achieving systemic transformation requires alignment at the planning and policy level, with improved coordination across national frameworks.**⁵ Integrating holistic approaches into national planning mechanisms to support co-benefit realization is critical to maximizing resilience. By promoting whole-of-government approaches, IFAD strengthens coordination between agriculture, finance and environmental ministries to enhance policy coherence and build the adaptive capacity of small-scale production systems.
6. **Despite the pressing need for rural transformation, slow finance deployment and limited institutional capacity remain major obstacles.** IFAD estimates that small-scale farmers require US\$75 billion in climate finance annually to achieve resilience and enhance their livelihoods over the long term.⁶ However, policy gaps, market barriers and high transaction costs restrict access to critical resources, making sustainable transitions difficult. Urgent, coordinated action is needed to scale investment, enhance financial accessibility and strengthen rural resilience.
7. **This strategy will be implemented in line with the IFAD Poverty Targeting Policy 2023,⁷ which prioritizes the most vulnerable rural people: small-scale farmers, Indigenous Peoples, women, youth and other marginalized groups.** The strategy adopts a people-centred approach, ensuring that interventions are tailored to meet the diverse needs of rural communities and promote their active participation in sustainable rural transformation. By aligning with IFAD's focus on empowering poor and excluded groups, the strategy reinforces IFAD's commitment to building climate resilience, adaptive capacity and food security, while advancing inclusive and sustainable rural development. A strong focus on women's economic empowerment will be embedded across operations, with particular emphasis on enhancing women's access to financial resources and equality, and improving their economic returns from farming.
8. **This strategy positions rural resilience as an all-encompassing concept that addresses climate risks, environmental degradation, biodiversity loss and socioeconomic vulnerabilities across the agricultural value chain.** Recognizing the challenges small-scale producers face – from extreme weather to market disruptions – the strategy balances production and market-driven solutions to build resilience across the value chain, from inputs to marketing. By addressing risks holistically, the strategy helps farmers sustain yields, boost productivity, access fair markets and reduce losses.
9. **Supporting investments in nature, environmental management and ecosystem restoration delivers significant economic returns.** Estimates suggest that every US\$1 invested in ecosystem restoration can yield US\$7 to US\$30 in economic benefits through improved ecosystem services, enhanced agricultural productivity and reduced disaster risks.⁸ Furthermore, research indicates that land degradation costs the world more than US\$6.3 trillion a year,

⁵ Intergovernmental Panel on Climate Change (IPCC). 2023. [Climate Change 2023: Synthesis Report](#).

⁶ IFAD. 2024. [The US\\$75 billion climate finance gap: An imperfect but important figure for small-scale farmers](#).

⁷ IFAD. 2023. [IFAD Poverty Targeting Policy 2023](#).

⁸ See footnote 3.

equivalent to approximately 8.3 per cent of the global economy.⁹ Additionally, failure to address biodiversity loss could greatly impact the world economy. The World Economic Forum estimates that over half of global economic production, US\$44 trillion, is dependent on nature.¹⁰ Implementing sustainable land management practices can mitigate these risks by restoring soil health, increasing biodiversity and enhancing ecosystem services.

10. **This strategy was 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.
11. **By integrating holistic approaches into operations, national planning and public-private-producer partnerships (4Ps), IFAD aims to unlock greater investment, empower rural communities and enhance both on-farm and economic resilience.** This approach positions IFAD as a leader in climate resilience,¹¹ environmental management, and biodiversity-positive practices for sustainable rural transformation at the global level.

B. The changing global policy context

12. **The global development agenda acknowledges the importance of building resilience, addressing these thematic areas and transforming rural economies.** International frameworks such as the Sustainable Development Goals (SDGs) highlight the link between rural livelihoods, land productivity and economic growth.
13. **Governments are embedding climate resilience-focused policies into national planning to address extreme weather, land degradation and food shortages, but investment needs far exceed public finance.** With shrinking aid and rising fiscal pressures, resources must be used more efficiently and deliver greater economic impact. MDBs, commercial banks and private investors are aligning with global sustainability frameworks to scale investment in rural economies, and unlocking private capital remains essential to combating the triple threat. Without innovative financing, stronger accountability and enhanced international cooperation, vulnerable communities will face worsening food security, dwindling resources and declining rural economies.

II. Strategic alignment and theory of change

A. Fit with IFAD's institutional strategy and organizational goals

14. This strategy aligns with the strategic objectives of the Strategic Framework 2025–2031:
 - **Strategic objective 1:** Increased economic opportunities in rural areas;
 - **Strategic objective 2:** Improved food security and nutrition for rural poor people; and
 - **Strategic objective 3:** Strengthened natural resource management and resilience of rural communities.

⁹ Sutton, Paul C., et al. 2016. The ecological economics of land degradation: Impacts on ecosystem service values. *Ecological Economics*, vol. 129, pp. 182-192.

¹⁰ World Economic Forum. 2020. [Nature Risk Rising: Why the Crisis Engulfing Nature Matters for Business and the Economy](#).

¹¹ In the context of this strategy **climate resilience is defined** as the capacity of rural communities and agricultural systems to withstand, adapt to, mitigate and recover from precipitation-, temperature- and wind-related stresses and shocks. It incorporates mitigation measures to prevent these shocks, adaptation measures to reduce their impacts on small-scale agricultural value chains, and risk reduction measures to help recover, tailored to local contexts.

B. Key principles driving the strategy

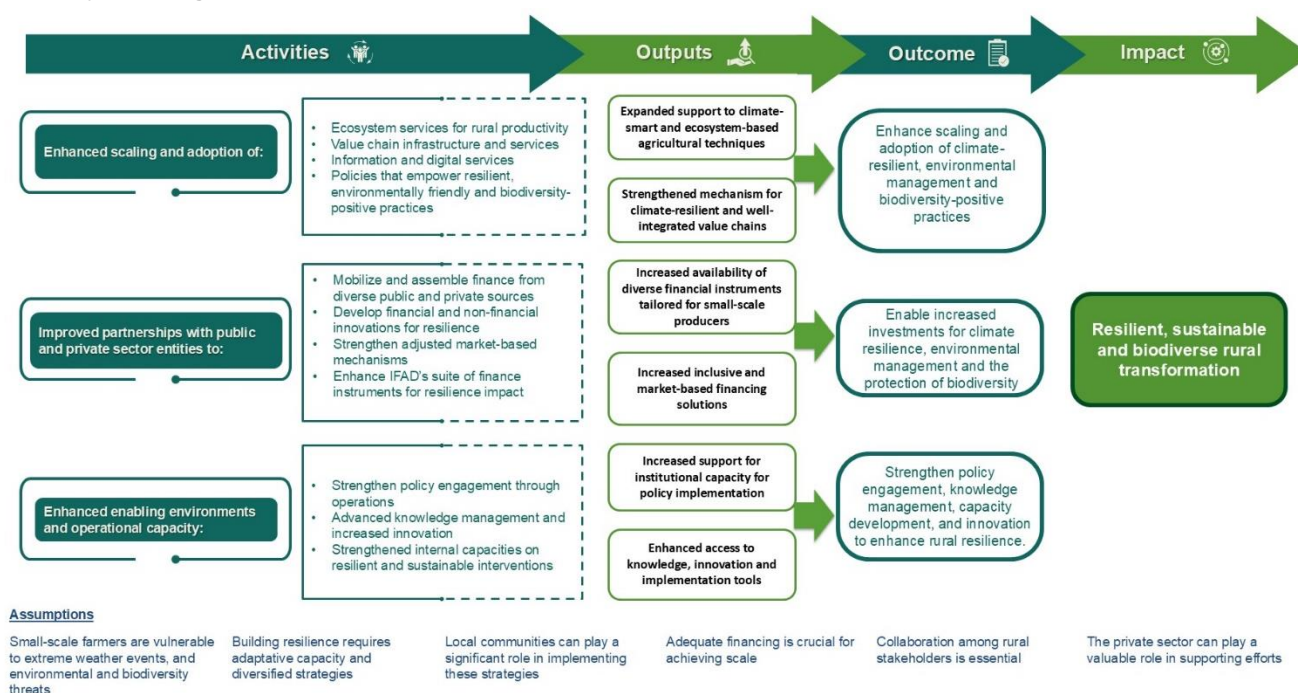
15. To align with IFAD's mandate, the following principles are embedded across the action areas:
- (a) **Multiple-benefit approaches** – prioritize nexus interventions¹² that enhance rural livelihoods by securing land tenure, boosting productivity and nutrition, and strengthening the climate resilience and sustainability of natural resources and rural economies;
 - (b) **Market-focused innovation** – promote the development and use of market-based mechanisms such as carbon markets, incentive-based conservation models and biodiversity credits. The strategy will also leverage blended climate finance, 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 and economic shocks, to increase sustainable rural development 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.

C. Theory of change

16. 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.

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.

Figure 1
Theory of change



III. Climate, Environment and Biodiversity Strategy 2025–2031

A. Outcome of prior strategies

- IFAD has made significant progress in strengthening rural economies by addressing key risks such as drought, flooding, low yields, land degradation and deforestation.** In the last five years, IFAD has allocated 49 per cent of total investments to support interventions that improve productivity, enhance climate resilience and stabilize rural livelihoods. This resulted in approximately US\$300 million more in 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 agriculture to boost long-term agricultural productivity and reduce risks of food supply disruptions and declining output. However, small-scale farmers still face major financial barriers, limiting their ability to adopt risk-reducing strategies.
- 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 increased engagement with multilateral funds such as the Green Climate Fund (GCF), Global Environment Facility (GEF) and Adaptation Fund (AF), mobilizing US\$493.5million in resources from 2019 to 2022.¹⁵

B. Lessons learned

- 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

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

¹⁴ Ibid.

¹⁵ Ibid.

benefits of investing in drought-resistant crops, early warning systems, soil restoration and sustainable water management to strengthen food security and rural livelihoods.¹⁶ 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.¹⁷

20. **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 ensure IFAD's operations remain effective, scalable and aligned with country priorities (see annex III for a full account of lessons learned).

C. Strategic goal

21. The goal of this strategy is to contribute to sustainable and inclusive rural economic transformation by promoting climate-resilient, environmentally managed and biodiversity-positive investments and practices, thereby enhancing the livelihoods of IFAD's target group, including rural communities and small-scale farmers.
22. 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

23. **This strategy defines IFAD's corporate approach to advancing climate resilience, environmental management and biodiversity-positive practices across its operations.** Implemented flexibly and country-driven, the strategy will align with national priorities, institutional capacities and rural socioeconomic realities. It will inform IFAD's investment pipeline and policy engagement at country, regional and global levels, ensuring interventions are locally relevant, adaptable and impactful while strengthening IFAD's role in global policy discussions.
24. The strategy is built around three interconnected objectives. Objective 1 defines the **what** – scaling climate resilience-focused, biodiversity-positive and economically sustainable agricultural practices to enhance productivity, environmental management and rural livelihoods. Objective 2 focuses on the **how** – mobilizing targeted financial investments from 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.
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. In fragile contexts, climate and environmental considerations will be systematically integrated into the quality assessment of interventions, ensuring that

¹⁶ IOE. 2024. [2024 Annual Report on the Independent Evaluation of IFAD](#).

¹⁷ MOPAN. 2024. [MOPAN assessment of IFAD 2023](#).

sustainability and resilience are core to project design and delivery. In doing so, the strategy supports the implementation of national development plans and achievement of Member State commitments, including those linked to the Rio Conventions.¹⁸

Objective 1: Enhance scaling and adoption of climate-resilient, environmental management and biodiversity-positive practices

Action area 1.1: Promote activities across rural economies that protect and restore ecosystem services and biodiversity for higher agricultural productivity at the farm level

26. This action area promotes climate-resilient, environmental management and biodiversity-positive agricultural practices to increase sustainable productivity and strengthen rural livelihoods. These three dimensions, while distinct, are deeply interconnected and mutually reinforcing. Climate-resilient practices will focus on enhancing farmers' capacity to mitigate and adapt to climate-related shocks, such as extreme weather events, droughts and floods. This includes the adoption of agroecology, agroforestry, watershed management and regenerative agriculture to improve soil health, enhance water management and reduce vulnerability to climate shocks.
27. Environmental management measures will prioritize the sustainable management of land, water and other natural resources. Through sustainable land management, nature-based solutions and pollution reduction, such as addressing the harmful impacts of agrochemical overuse, agricultural systems will minimize degradation and safeguard essential ecosystem services like water regulation, carbon sequestration and soil fertility. Biodiversity-positive practices will focus on conserving and enhancing biological diversity at both the farm and landscape levels. These efforts will include protecting pollinators, promoting diversified cropping systems and restoring natural habitats to sustain healthy and functioning ecosystems.
28. Together, these three strands will be integrated through a landscape-based approach¹⁹ to address interconnected environmental, social and economic challenges at scale. By safeguarding ecosystems, reducing environmental degradation and strengthening rural communities' ability to respond to climate shocks, the strategy will create synergies that deliver multiple benefits across productivity, livelihoods and ecological health.
29. An integral co-benefit of these climate-resilient, environmentally well-managed and biodiversity-positive practices is the enhancement of rural and smallholder nutrition outcomes. Diversified and resilient agricultural systems contribute directly to improved dietary diversity by increasing the availability and accessibility of nutrient-dense foods, such as legumes, fruits, vegetables and Indigenous crops. Practices like intercropping help integrate nutrient-rich species into farming systems, while soil and water conservation techniques improve yields and the nutritional quality of produce. By linking ecosystem health to human health, this approach strengthens the capacity of rural households to access safe and nutritious diets year-round, contributing to better food security and reduced malnutrition in vulnerable populations.
30. The strategy will also promote locally owned and traditional practices that have proven effective in improving sustainability and resilience, particularly in fragile contexts. It emphasizes the importance of addressing land conflicts, integrating

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 (CBD), the [United Nations Framework Convention on Climate Change \(UNFCCC\)](#), and the [United Nations Convention to Combat Desertification \(UNCCD\)](#).

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.

desertification and land protection considerations into investment planning, and supporting the development of sustainable agribusiness models to enhance the economic viability of these practices.

31. Incentive-based conservation mechanisms will further encourage farmers to adopt and maintain sustainable land management and biodiversity-positive practices. Securing land tenure rights will empower rural communities to confidently invest in long-term solutions that improve productivity and climate resilience while protecting natural resources.
32. 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 and rural realities.

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

33. 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.
34. 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.
35. Investments will also focus on modernizing value chains to support rural producers in transitioning to more climate-resilient and adaptive economies. IFAD will promote energy access and solutions that enhance rural value chain activities, encouraging the adoption of low-emission and energy-efficient technologies and decentralized energy systems where appropriate.

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

36. By expanding rural digital connectivity, IFAD will strengthen policies, legal frameworks and institutions to improve access to real-time weather forecasting for climate risk mitigation. Scaling hydrometeorological data, soil and water monitoring, and pest tracking will enhance adaptive capacities. Tailored market insights and best practices, incorporating local and Indigenous knowledge, will empower communities, bridge the digital divide and unlock agribusiness opportunities.
37. Granular, contextualized data is essential for impact monitoring and investment design. IFAD will expand partnerships and use geospatial and remote sensing technologies, integrating verified national data to track extreme weather impacts. Improved data access will optimize resource allocation, inform policy and enhance adaptation outcomes.

Objective 2: Enable increased investments for climate resilience, environmental management and the protection of biodiversity

Action area 2.1: Mobilize and assemble a diverse set of international, regional and national sources of finance

38. To close the finance gap for resilient agriculture, IFAD will mobilize climate finance resources from multilateral funds such as the GCF, GEF, AF and Global Biodiversity

Framework Fund, managing complex processes on behalf of small-scale producers to ensure timely and substantial funding. By securing grants and blending them with its own resources, IFAD expands concessional financing, easing financial burdens on partner countries while unlocking capital for climate resilience, environmental management and biodiversity-positive practices. These efforts support the broader goal of closing the agricultural adaptation finance gap.

39. 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.

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

40. To incentivize greater adoption of environmentally sustainable and biodiversity-positive practices, IFAD will develop and implement market-based mechanisms that align economic incentives with resilience efforts. 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.
41. To effectively manage these trade-offs, IFAD will deploy blended climate finance solutions, phased adoption models 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. Collaboration with public development banks will be critical, leveraging their local presence, financial instruments and market expertise to mobilize additional resources and amplify the impact of blended finance initiatives.
42. IFAD will innovate and integrate financial tools with ecosystem services metrics and new areological indicators that demonstrate 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.
43. 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. 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

44. Apart from ensuring that 45 per cent of IFAD's total investment qualifies as climate finance and operationalizing the new additional climate contributions under IFAD13, IFAD will enhance financial innovation in rural investment, aligning its suite of financial products with national agricultural strategies and risk reduction objectives. This includes expanding agriculture-focused bonds, credit guarantees and risk-

sharing mechanisms to encourage 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.

45. 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

46. 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.
47. 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, 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 with opportunities in developing climate-resilient and biodiversity-positive rural markets;
 - (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.
48. IFAD will collaborate with Indigenous Peoples, youth, women's organizations and farmers' organizations to mobilize resources for climate resilience, environmental management and biodiversity-positive 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

49. 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 support countries in implementing their commitments towards achieving global goals, including nationally determined contributions, national biodiversity strategies and action plans and other relevant frameworks. In partnership with governments, IFAD will help integrate climate resilience, environmental management and biodiversity measures into national development planning and budgeting processes.
50. 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. In this context, governments have a critical role in repurposing harmful agricultural subsidies that contribute to land degradation, biodiversity loss and greenhouse gas emissions. Redirecting these subsidies towards climate-resilient and environmental management practices is essential to driving systemic change and maximizing the impact of both public and private investments in rural development.

51. 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

52. IFAD will enhance knowledge generation, dissemination and application to drive evidence-based decision-making and innovation in rural investment strategies. By institutionalizing lessons learned, leveraging advanced analytics and fostering a culture of continuous learning, IFAD will strengthen adaptive management and scalability of rural investment solutions.
53. 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, financial innovations and scalable models for rural economic resilience.

Action area 3.3: Build capacity for effective implementation

54. IFAD will strengthen institutional and human capacities to embed rural resilience, environmental management and biodiversity-positive measures into its projects. Comprehensive training will enhance staff expertise in economic risk assessment, adaptation 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.
55. 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

56. IFAD will streamline existing climate resilience and adaptive capacity indicators into its operations and Results Management Framework (RMF) for effective monitoring and evaluation.²⁰ The strategy will be operationalized through existing project cycles, ensuring alignment with IFAD's core mandate and evolving country-level priorities.
57. 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. Regular engagement will be conducted with country directors (CDs), project delivery teams (PDTs), country strategic opportunities programme (COSOP) design teams (CDTs) and other key staff to integrate the strategy's objectives into operations. These efforts will be reinforced by ongoing analysis demonstrating the

²⁰ To facilitate streamlined reporting, a separate RMF will not be developed for the strategy.

economic case for resilience-focused investments across IFAD's financial instruments.

58. 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.
59. 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).
60. 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 proposed IFAD Strategic Framework 2025–2031 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.** An informal Executive Board seminar facilitated detailed feedback from Member States and observers on the full strategy.

Theory of change

1. The theory of change envisions long-term 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. 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.
3. 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.
4. 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.
5. Digital tools and data systems 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.
6. 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 and expand climate-resilient, environmentally sensitive and biodiversity-positive practices for long-term rural transformation.

Lessons learned

- Over the past decade, IFAD has significantly strengthened its performance, environmental and natural resources management, and climate 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 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 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 green or biodiversity targets. MDBs are also refining taxonomies and strengthening capacity for biodiversity and climate investments.
4. MDBs use safeguards to assess climate 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 finance for climate 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.

Green 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 green 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 needs. Limited resources could hinder success.	Regular progress assessments in Programme Management Committee meetings will track implementation, address bottlenecks and allow for adjustments as needed. 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.
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 resilience, biodiversity loss and environmental degradation

A. Context

1. Climate resilience, 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.²¹ 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 Health²² underscores the interconnections between climate resilience, 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 freshwater 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 agricultural productivity 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 resilience, 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.

²¹ IPBES-IPCC. 2021. [Co-Sponsored Workshop on Biodiversity and Climate Change](#).

²² 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 extreme weather events.
4. Siloed approaches that fail to consider the ways extreme weather events, 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.²³ 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.²⁴ 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.²⁵ 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.²⁶ 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.²⁷
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

²³ De Lamo, Xavier, et al. 2020. [Strengthening synergies: How action to achieve post-2020 global biodiversity conservation targets can contribute to mitigating climate change.](#)

²⁴ Liu, Jianguo, et al. 2015. Systems integration for global sustainability. *Science*, vol. 347, no. 6225.

²⁵ Smith, Risa, et al. 2019. [Ensuring Co-benefits for Biodiversity, Climate Change and Sustainable Development.](#)

²⁶ Agliardi, Elettra, Rossella Agliardi, and Willem Spanjers. The economic value of biodiversity preservation. *Environmental and Resource Economics*, vol. 87, pp. 1593-1610.

²⁷ 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.^{28,29} Consequently, in the long term, integrated approaches streamline development efforts, reduce costs, increase policy coherence and leverage co-benefits for system-wide sustainability.

²⁸ Schmidt-Traub, Guido, et al. 2021. Integrating climate, biodiversity, and sustainable land-use strategies: innovations from China. *National Science Review*, vol. 8, no. 7.

²⁹ 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,³⁰ 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 resilient, environmentally sound and biodiversity-positive investments. 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) 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;³¹
 - (b) Report by the High Level Panel of Experts on Food Security and Nutrition (HLPE) on the 13 principles of agroecology;³²
 - (c) International Finance Corporation (IFC) supplement on biodiversity finance metrics for impact reporting;³³ 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.³⁴

³⁰ IFAD. 2016. [IFAD Development Effectiveness Framework](#).

³¹ World Bank. 2024. [Common Approach To Measuring Climate Results](#).

³² HLPE. 2019. [Agroecological and other innovative approaches for sustainable agriculture and food systems that enhance food security and nutrition](#).

³³ IFC. 2024. [Biodiversity Finance Metrics for Impact Reporting](#).

³⁴ 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,³⁵ 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.

³⁵ 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 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.³⁶ 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,³⁷ especially when there are insufficient institutional arrangements in place to support them.³⁸ These areas often face high levels of fragility, socioeconomic instability and political unrest.³⁹</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.⁴⁰</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 2022,⁴¹ 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.⁴² 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.⁴³</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.⁴⁴ Weather events also strain public finances, with related damages adding up to 10 per cent of GDP in debt for some vulnerable countries.⁴⁵ At the same time, displacement – over 20 million refugees annually – is</p>

³⁶ 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.

³⁷ Ibid.

³⁸ Nguyen, Thanh-Tung, et al. 2022. Shocks, agricultural productivity, and natural resource extraction in rural Southeast Asia. [World Development](#), vol. 159.

³⁹ See footnote 31.

⁴⁰ 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.

⁴¹ Kotz, Maximilian, et al. 2024. Global warming and heat extremes to enhance inflationary pressures. [Communications Earth and Environment](#), vol. 5, no. 1.

⁴² Liu, Jianguo, et al. 2015. Systems integration for global sustainability. [Science](#), vol. 347, no. 6225.

⁴³ Smith, Risa, et al. 2019. [Ensuring Co-benefits for Biodiversity, Climate Change and Sustainable Development](#).

⁴⁴ FAO Food Price Index, October 2024.

⁴⁵ Maldonado, Franco, and Kevin P. Gallagher. 2022. [Climate Change and IMF Debt Sustainability Analysis](#).

	<p>increasing pressure on urban infrastructure and social services, further destabilizing economies.⁴⁶</p>
<p>Environmental degradation</p> <p>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.⁴⁷ Globally, natural resources (i.e. land, forests and water) have been reported to be increasingly degraded or depleted.⁴⁸</p>	<p>Loss of productive land for small-scale producers. Soil erosion, deforestation and desertification reduce land productivity and increase vulnerability to climate variability.⁴⁹</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>
<p>Biodiversity loss</p> <p>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.⁵⁰ 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.⁵¹</p>	<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>

⁴⁶ World Economic Forum. 2019. [The cost of the climate crisis? 20 million homeless every year.](#)

⁴⁷ 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.](#)

⁴⁸ 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.

⁴⁹ 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.

⁵⁰ UNEP. 2021. [Our global food system is the primary driver of biodiversity loss.](#)

⁵¹ 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 biodiversity-positive 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)