Adaptation for **S**mallholder **A**griculture Programme

ASAP

J. IFAD Investing in rural people

THE BELGIAN DEVELOPMENT COOPERATION



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WHAT IS ASAP?

The Adaptation for Smallholder Agriculture Programme (ASAP) was launched by the International Fund for Agricultural Development (IFAD) in 2012 to make climate and environmental finance work for smallholder farmers. A multi-year and multi-donor financing window, ASAP provides a new source of cofinancing to scale up and integrate climate change adaptation across IFAD's approximately US\$1billion per year of new investments. The programme is joined up with IFAD's regular investment processes and benefits from rigorous quality control and supervision systems.

ASAP is driving a major scaling up of successful 'multiple-benefit' approaches to smallholder agriculture, which improve production while reducing and diversifying climate-related risks. In doing so, ASAP is blending tried-andtested approaches to rural development with relevant adaptation know-how and technologies. This will increase the capacity of at least 8 million smallholder farmers to expand their livelihood options in an uncertain and rapidly changing environment.





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WHY IS ASAP NEEDED?

The challenge climate change poses to the world's 500 million smallholder farms cannot be overlooked.

Smallholder farmers provide up to 80 per cent of food in sub-Saharan Africa and parts of Asia, manage vast areas of land and make up the largest share of the developing world's undernourished people. They inhabit some of the most vulnerable and marginal landscapes, such as hillsides, deserts and floodplains, where their livelihood assets are exposed to a variety of climatic hazards. Many smallholder farmers lack secure tenure and resource rights, and rely directly on climate-sensitive natural resources for their livelihoods.

Climate change is transforming the context of smallholder agriculture.

Over centuries, smallholders have drawn on indigenous knowledge and historical observations to manage the effects of a variable climate. Today, the speed and intensity of environmental change is outpacing their capacity to do so. Historical averages are no longer a reliable guide for the future. Losses and damages from extreme weather events keep increasing, as the patterns of droughts, floods and tropical storms are becoming more unpredictable. In parallel, rural livelihoods are undermined by the creeping effects of water stress, land degradation and loss of biodiversity.

Avoiding and managing climate risk is a prerequisite for poor rural people to move out of poverty.

Poor rural people are less resilient because they have fewer assets to fall back on when shocks occur. In an environment in which long-standing risks such as ill health, market volatility, food insecurity and poor governance are compounded by the degradation of natural resources and climate change, new opportunities for growth are beyond the reach of many poor rural people. Innovative policies and investment programmes are needed to help smallholders respond to this new and more difficult risk environment, and anticipate, absorb and recover from climate shocks and stresses.



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HOW IS IFAD RESPONDING?

Responding to climate change does not mean throwing out or reinventing everything that has been learned about development.

Instead, it requires a renewed effort to tackle wider and well-known development challenges and putting a proper appreciation of risks at the centre of the development agenda. A coherent response to climate change requires continued focus on country-led development, communitybased natural resource management, gender equality and women's empowerment, land tenure security, access to financial services and markets, environmental sustainability and institutional capacity-building.

But beyond regular development best practice, what is really different about climate-resilient agriculture? For IFAD, it is about doing more of the things that work, and doing these things better.

ASAP's first principle is to **scale up** those tried and trusted approaches to rural development that have proven successful in delivering resilience benefits to smallholders. IFAD has a strong track record working with communities on a broad range of climate-smart approaches. These include drought and flood risk management, drought and salt-tolerant crop varieties, mixed crop-livestock systems, integrated water resources management, land regeneration, agroforestry and improving post-harvest storage. IFAD has the capacity to support more of these approaches and scale up what works.

But climate change also requires **new ingredients** in rural development programmes to improve their effectiveness and impact in a changing and increasingly uncertain environment. Such new approaches include the use of downscaled climate models for long-run scenario planning, community-based climate vulnerability and capacity analysis, and empowering local institutions to engage with national climate policy. They also involve improving the collection, analysis and dissemination of meteorological data, establishing evidence-based monitoring systems for climate resilience, providing access to risk transfer and insurance schemes, and re-assessing infrastructure and land-use plans taking new and emerging risks, such as sea level rise, into account.

In line with this logic, IFAD's response to the climate change challenge focuses on:

- Basing projects and policies on a deeper risk assessment and a better understanding of the interconnections between smallholder farming and wider landscapes.
- 2) Substantially scaling up successful multiplebenefit approaches to sustainable agricultural intensification. These not only build farmers' resilience to climate shocks but also contribute to other public policy goals such as reducing poverty, conserving biodiversity, increasing yields and lowering greenhouse gas emissions.
- Enabling smallholder farmers to become significant beneficiaries of climate finance and achieve (and measure) a wider range of multiple benefits, going beyond the traditional 'poverty and yield' approach.

CONCRETE OBJECTIVES AND TARGETS

| Results Hierarchy | 10 Key Indicators | 2020 Target Impact |
|---|---|---|
| Goal: Poor smallholder farmers are more resilient to climate change | 1. # of poor smallholder household members whose climate resilience has been increased because of ASAP – disaggregated by sex | 8 million people, including 4 million women and girls |
| Purpose: Multiple-benefit adaptation approaches for poor smallholder farmers are scaled up | % of new investments in Environment and Natural Resource Management (ENRM) in IFAD 9th Replenishment compared with IFAD 8th Replenishment | Doubling share of ENRM investments in IFAD9 compared with IFAD8 |
| | 3. Leverage ratio of ASAP grants versus non-ASAP financing | 1:4 |
| | 4. % extent of land and ecosystem degradation in productive landscapes | Minus 30% |
| 5 ASAP Outcomes | 5. # of tons of greenhouse gas emissions (CO ₂ e) avoided and/or sequestered | 80 million tons |
| Improved land management and gender-sensitive climate-resilient agricultural practices and technologies | 6. # increase in hectares of land managed under climate-resilient practices | 1 million hectares |
| 2. Increased availability of water and efficiency of water use for smallholder agriculture production and processing | # of households, production and processing facilities with increased water availability or efficiency | 100,000 households |
| 3. Increased human capacity to manage short- and long-term climate risks and reduce losses from weather- related disasters | 8. # of individuals (including women), community groups and institutions engaged in climate risk management, Environmental and Natural Resource Management (ENRM) or Disaster Risk Reduction (DRR) activities | 1,200 groups |
| 4. Rural infrastructure made climate-resilient | 9. US\$ value of new or existing rural infrastructure made climate-resilient | US\$80 million |
| 5. Knowledge on climate-smart smallholder agriculture documented and disseminated | # of international and country dialogues on climate issues where ASAP-supported projects or project partners make an active contribution | 40 dialogues |

PARCELLE N'15 HORDEUM VULGARE LATHYRUS HORDEUM VULGARE VICIA SATIV HORDEUM VULGARE RIHAN - 03 HORDEUM VULGARE BEECHER HORDEUM VULGARE TRITICALE

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HOW WILL ASAP FUNDS BE SPENT?



1. Improve land management and promote gender-sensitive, climate-resilient agricultural practices and technologies

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- Identify and promote crop varieties that are heat, drought and salt-tolerant, including wild varieties with high nutritional value.
- Optimize land-use systems, such as shifting from yield per hectare to 'crop-per-drop' systems.
- Develop capacities among local institutions to plan and adopt agroecological farming models in a changing environment.
- Scale up sustainable land management practices to the landscape level to increase agricultural production, improve hydrogeologic functions, replenish soil nutrients, sustain floral and faunal diversity, moderate microclimates and reduce pest infestations.
- Strengthen expertise in agricultural research, and advisory and extension services on climate risk management and adaptation.
- Test prototypes of agricultural production systems that can withstand climate-induced

stresses in different agroecological zones, and shift from extensive low nutrition agricultural productive systems to intensive high nutrition ones.

- Use the Geographic Information System (GIS) to better understand and monitor land use and patterns of climate and human-induced land degradation.
- Provide access to improved seed varieties that are resilient to climatic stresses and can be conserved in situ through seed banks.
- Establish robust community seed, food and forage storage that can protect harvests from extreme weather events.
- Rehabilitate natural systems such as mangroves, coastal wetlands, sand dunes, and coral reefs to protect agriculture in coastal areas against climate risks.
- Develop access to green markets and create incentives for climate-resilient products.



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2. Increase availability and efficient use of water for smallholder agriculture production and processing

- Analyse water use and distribution at the landscape level to design sustainable agricultural production and processing systems and nutrient, energy and water reuse systems.
- Use integrated water resource management to maintain and improve healthy functioning of watersheds.
- Combine watershed management with climate-resilient land-use planning, climate-compatible infrastructure, water recycling and grey water use.

- Undertake watershed management for comprehensive, climate-compatible infrastructure planning.
- Adopt a range of water harvesting techniques, such as low-cost groundwater recharge methods, efficient irrigation systems and communal rainwater harvesting.
- Improve flood risk management using mini-dams and levees to control catchment sources and reduce peak discharges.



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3. Increase capacity to manage short- and long-term climate risks and reduce losses from weather-related disasters

- Undertake gender-differentiated vulnerability and risk assessments to appraise the resilience of livelihood systems and understand smallholder ideas for risk management and adaptation.
- Provide communities with access to weather and climate information to help monitor and respond to climate change impacts (for example, by switching crop varieties and/or planting calendars).
- Strengthen community-based disaster preparedness (including social networks and safety nets), response and rehabilitation mechanisms.
- Appraise the feasibility of market-based climate risk management strategies based on financial assets (savings, mutualization, insurance).

- Develop user-friendly data management systems and coordination mechanisms to support climate risk management across sectors and administrative levels.
- Develop policy frameworks that respond to increasing levels of risk in a changing environment.
- Improve regulatory systems to provide incentives for adaptation planning and climate-smart sustainable land management.
- Improve clarity of governance structures related to climate risk management and establish links between local institutions and national government structures.
- Strengthen capacity of women's groups, gender researchers and ministries to analyse gender perspectives of climate risk management and their practical implications.

4. Increase climate resilience of rural infrastructure

- Assess climate change impacts on key agricultural infrastructure to refine design and engineering specifications.
- Build or retrofit rural infrastructure to cope with climate-related risks (such as water shortages, extreme weather events) using adaptive engineering such as natural dykes, breakwaters and submersible roads.
- Strengthen food security systems by improving the robustness of storage and

marketing facilities, incorporating the ideas and perspectives of rural women and men.

- Improve water collection, transfer and dissemination systems (such as flood-proofing of handpumps) to prevent climate-induced contamination or pollution.
- Integrate exposure and sensitivity of critical infrastructure to climate hazards into revised land-use and maintenance schemes.

5. Document and disseminate knowledge on climate-smart smallholder agriculture

- Document, disseminate and replicate traditional knowledge and farmer-generated innovations for management of natural resources, thereby promoting adaptation and healthier ecosystems.
- Develop and improve systems to collect, analyse and disseminate climate data to reduce climate risks in local investment and planning decisions.
- Enhance use of information and communication technologies to disseminate climate risk and early warning information (such as early warning signals through mobile phone networks).
- Promote South-South cooperation to exchange knowledge on climate change responses and develop multi-country initiatives that foster uptake of adaptation measures.

- Present lessons learned and project experiences on adaptation in international forums and advocacy initiatives.
- Disseminate knowledge on climate-resilient smallholder agriculture in national planning processes such as poverty reduction strategies, and agricultural and climate change policies.
- Strengthen the capacity of women's ministries, women's groups and gender researchers to capture and document gender perspectives of climate change and their practical implications for adaptation planning.
- Document and share knowledge with international networks such as the Global Gender and Climate Change Alliance and the World Initiative for Sustainable Pastoralism and ensure involvement of marginalized groups.



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IFAD is an international financial institution and a specialized United Nations agency dedicated to eradicating poverty and hunger in rural areas of developing countries.

ASAP is supported by the governments of Belgium, Canada, Finland, Netherlands, Norway, the Republic of Korea, Sweden, Switzerland, and the United Kingdom.

IFAD Adaptation for Smallholder Agriculture Programme www.ifad.org/climate/asap

IFAD Climate Change Strategy www.ifad.org/climate

IFAD ENRM Policy www.ifad.org/events/enrm

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