

Financial Resilience in Agriculture

Advancing Smallholder Farmers' Resilience and Adaptation to Climate Change

Consultation Paper, May 2024



UNDP's Financial Resilience in Agriculture (FRA) solutions are dependent on collaborative and ambitious action. The UNDP Insurance and Risk Finance Facility (IRFF) team invites feedback and comments on all matters in this paper. In particular, we welcome proposal on ways of collaboration to implement the theory of change around the role of agricultural insurance in climate adaptation and delivery model interventions.

Comments are most helpful if they:

- Indicate the specific area to which the comment relates;
- Contain a clear rationale; and
- Describe any alternatives UNDP FRA should consider.
- Recommend partnership opportunities and ways to leverage resources to accelerate innovations at scale.

UNDP will consider all feedback received by 15th September 2024.

This paper is an invitation to offer insights and capabilities on using innovative insurance solutions to build smallholder farmers' resilience and adaptation to climate change.

Read, comment, join us.

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The problem: Climate Change and Small-Scale Farmers

Our climate continues to change at alarming levels, with 2023 not only the hottest year since records began, but all ten of the warmest years on record all happening in the last decade. The impact is increasingly severe, with drought, sea level rise, cyclones and storms and much more increasingly severe and frequent, impacting across the environment, ecosystems, communities and countries. This is especially the case in low-income and vulnerable countries which are often particularly impacted by the hazards and shocks associated with climate change, while having less resilience and capacity. Runaway climate change could drive as many as 135 million people into poverty by 2030 (World Bank, 2020), erode gains in food security and undermine the sustainability of agrifood systems, which are profoundly dependent on natural resources and climate conditions (FAO, 2023). An estimated US\$3.8 trillion in crops and livestock production has been lost due to disaster events over the past three decades, corresponding to more than 5 percent of annual global agricultural GDP. (The figure would be significantly higher if systematic data were available on losses in the fisheries and aquaculture and forestry subsectors (FAO, 2023).)

At the same time, only a meagre share of climate finance goes towards building the resilience of agrifood systems and smallholder farmers, significantly limiting management of the impacts of climate change. Financing is a critical barrier for smallholder farmers to access inputs and technologies they need to increase production and income. Climate finance to small-scale agrifood systems was strikingly low in 2019/20, at just \$5.53 billion, far below the needs of producers and supply chain actors. According to the Climate Policy Initiative this represents just 0.8 percent of total climate finance tracked across all sectors (\$660.2 billion), and 19 percent of financing flows to agrifood systems as a whole (\$28.5 billion). Similarly, the annual unmet general financing needs of smallholder farmers

are estimated at \$170 billion, and of agri-SMEs, at \$106 billion (ISF Advisors, 2022). This absence of financing hinders the adoption and use of climate adaptation measures, including the cultivation of high-yield and drought-tolerant seed varieties as well as soil and water conservation practices, which have been proven to help avoid or reduce losses in agricultural production and incomes caused by climatic hazards (FAO, 2019). These poor levels of financing are more worrying because in countless developing countries, small scale farming is the backbone of many countries' food production and food security, livelihoods and employment, growth and development.

Relative to other sectors, agricultural markets are volatile and perceived as risky, with high transaction costs and low margins for many smaller value chain players. De-risking schemes that combine market incentive development (e.g., value chain development, bank incentive mechanisms), rural finance instruments (e.g., credit guarantee schemes, agriculture insurance) and technical assistance have been explored by some countries to address risks related to agricultural production, post-production activities and lending (Szebin et al., 2021) and most initiative at country level are at pre commercial level with few evidence at scale on national agricultural insurance schemes in India, Zambia, Senegal and Kenya. De-risking with scale in infrastructure, operations know how and farmer reach are scheme that are well institutionalized and linked to specific national government priorities and implemented through public private partnerships.

In most countries, **insurance and risk finance instruments** are not explored within a broader de-risking framework, which may hold back the development of scalable and sustainable business models and inclusive markets, creating missed opportunities in unlocking and attracting finance to achieve top national priorities and development

outcomes such as food security, climate adaptation and financial resilience. In 2023, 330 million people were recorded as covered by a microinsurance

product in 36 countries (MiN, 2024). This represents only 11.5% percent of the total population that could benefit from microinsurance in the countries studied.

The solution: The Financial Resilience in Agriculture Initiative (FRA)

The Financial Resilience in Agriculture Initiative (FRA) is a project of UNDP's Insurance and Risk Finance Facility (IRFF) implemented in partnership with the Bill and Melinda Gates Foundation (BMGF). Working with public and private partners in Bangladesh, Ethiopia, India, Uganda and the United Republic of Tanzania, UNDP is bolstering the financial resilience and adaptation capacities of smallholder farmers against climate-related adversities through the design and implementation of innovative agricultural insurance programmes, anchored within a broader development agenda.

Through the FRA global platform, which acts as a platform for knowledge and resource mobilization, UNDP offers technical and engagement support to other countries around the world.

The Theory of Change

Agricultural insurance, while of substantial value in itself, should be an enabler, contributing to development outcomes such as the financial resilience and climate adaptation of smallholder farmers. To ensure that agricultural insurance can fulfil this role, the FRA Theory of Change (TOC) **integrates a market systems approach to help build well-functioning agricultural insurance markets.** The TOC aims to address the market failures that have prevented agricultural insurance programmes from **reaching scale and building sustainable business models** for actors from the inclusive insurance ecosystem.

To achieve this, FRA is contributing to three outcomes, or building blocks, that are foundational to building well-functioning agricultural insurance markets: **Enabling Environment, Market Foundations** and **Innovation Models.**

1. ENABLING ENVIRONMENT. Governments need to see value in the role of agricultural insurance as an enabler for achieving development outcomes, to integrate agricultural insurance into the development agenda, and to institutionalize the agricultural insurance agenda by setting up policies, regulations, programmes and financing instruments. When a government defines its role within the country market dynamics, it creates a favourable environment that incentivizes market players in turn to define their roles.

2. MARKET FOUNDATIONS. Local technical institutions need to develop in-country market supporting services for governments, especially in relation to evidence generation and impact measurement, and for market players, especially with regard to climate and agriculture data, pricing and risk modelling. Partnerships need to be strengthened towards developing tailored in-country technical capacities to scale capacity and enable local markets to deliver product solutions. In-country technical capacities and services create sustainability and a competitive talent pool, as well as ownership and trust in the market.

3. INNOVATION MODELS. Market players must build innovative business models to serve smallholder farmers with agricultural insurance products and build the case for the role of

agricultural insurance in building the resilience of smallholder farmers and agrifood systems. The goal is to create supply-demand partnerships that integrate the insurance agenda into the business model of products and services delivered to farmers. On the supply side, market players are

insurance companies, brokers and reinsurance companies. On the demand side, market players are agrifood systems players such as value chain actors, financial institutions, input providers and digital platforms. Market players may be private or public-led institutions.

Figure 1. FRA Theory of Change (TOC)

IMPACT	Enhanced financial resilience and adaptation capacities of smallholder farmers to manage climatic risks		
STRATEGIC OBJECTIVE	Leverage the role of agricultural insurance as an enabler for development outcomes		
OUTCOME AREAS	Well-functioning inclusive agricultural insurance markets		
	Government defines its role within the market and institutionalizes the agricultural insurance agenda	Market players build business models to serve smallholder farmers and build the case of the role of agricultural insurance	Local technical institutions develop in-country market supporting services for government and market players

Theory of Action – FRA Delivery

Agricultural insurance programmes have been implemented within specific country market dynamics in which governments, market players and/or donors were leading the agenda. To ensure full buy-in and ownership from government and market players, FRA will implement the following activities within each building block:

1. ENABLING ENVIRONMENT. To support governments in defining or revising the public role within the national agricultural insurance market, FRA will:

- Generate evidence from existing agricultural insurance pilots and programmes implemented by market players, with support from donors, development partners and academia
- Conduct policy advocacy to position agricultural insurance within the broader development agenda
- Build policymakers' technical capacities on agricultural insurance.

Once a government is on board and fully understands its position within the market, FRA will:

- Support the institutionalization process of an integrated agricultural insurance agenda, by
 - Providing technical assistance to draft policies
 - Revising regulations and/or piloting test sandboxes
 - Designing and implementing national programmes
 - Conducting cost-benefit analysis of (premium) subsidies schemes and exploring other financing instruments.

FRA will identify and work with local champions, including from ministries such as agriculture, finance and the environment, local governments and regulatory authorities, to lead the institutionalization process within their own political space.

2. MARKET FOUNDATIONS. To support the government and market in developing supporting services, FRA will:

- Identify local technical institutions such as meteorological agencies, agriculture research institutes and statistics bureaux
- Assess their technical and organizational capacities as well as current offer to the inclusive insurance market
- Develop a tailored capacity-building programme for each institution
- Place a technical resource (ideally a national expert) within the institution, in partnership with global institutions and experts, to deliver the capacity-building programme and develop in-country market supporting services
- Build a business model for each local technical institution around the new offer or service to the market, in order to ensure sustainability.

3. INNOVATION MODELS. To support market players in building business models and business cases, FRA will:

- Map existing service delivery models that are serving smallholder farmers with climate adaptation services (e.g., drought-tolerant seeds, climate-smart agricultural practices, financial services, inputs, etc.) and assess the opportunities for integrating agricultural insurance. Mapping will include national programmes implemented by government agencies, such as national inputs programmes, credit guarantee facilities, social protection schemes, etc.
- Position agricultural insurance as one (risk-transfer) instrument among other risk management instruments and seek to test the role of agricultural insurance within broader de-risking mechanisms to manage risks holistically, and so elevate the impact of agricultural insurance.
- Raise awareness among market players on the role of agricultural insurance in protecting the livelihoods of smallholder farmers and the business models of service providers, to make the case to market players for integrating agricultural

insurance into their business model and so move beyond distribution channels.

- Provide market players with technical assistance and grants (e.g., support for operations within innovative schemes). Market players interested in testing the approach in their service delivery models and helping to build the business case by generating evidence to prove the role of agricultural insurance in building resilience along the value chain will be able to apply to receive technical assistance to test a bundled model for at least two to three crop seasons.
- Market players will also need to commit financial and/or in-kind resources as evidence of genuine interest in testing the approach. Technical assistance will be provided to:
 - Redesign or develop agricultural insurance products
 - Facilitate partnerships with value chain players or other service providers
 - Conduct operational analysis of the service delivery model to determine how best to deliver a bundled agricultural insurance solution (from client awareness to claims management and payouts mechanisms)
 - Conduct value chain and gender analysis, etc.

Local technical institutions supported in the **Market Foundations** building block will develop monitoring & evaluation and impact assessment tools that will be applied to the bundled models to generate evidence, capture insights and build business models as well as establish the business case for the role of agricultural insurance. FRA will disseminate the results and evidence to replicate the model.

FRA's four-year timeline (2024–2027) broadly includes:

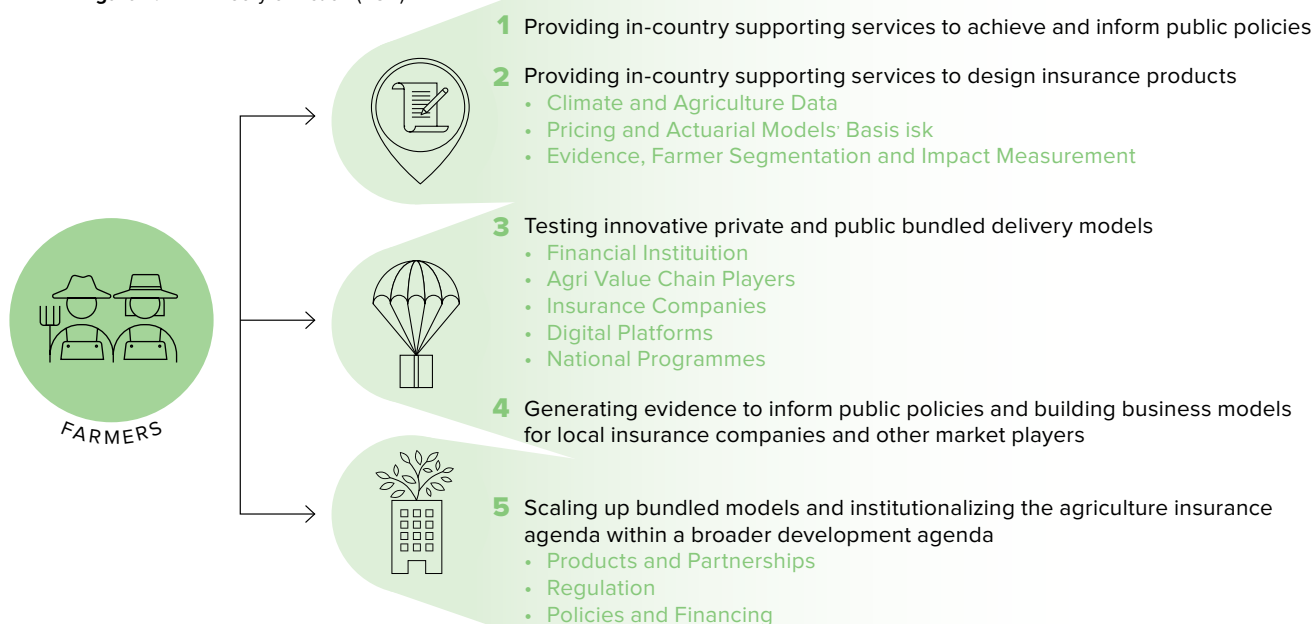
Year 1: Launching country interventions with full buy-in from government and market players

Year 2: Setting up local infrastructure/Driving in-country innovations

Year 3: Generating evidence and scaling up

Year 4: Supporting an evidence-based institutionalization process of the agricultural insurance agenda.

Figure 2. FRA Theory of Action (TOA)



Programme Management and Implementation

United Nations Development Programme – UNDP

UNDP works with a diverse range of partners to support countries, tackle multidimensional poverty, promote gender equality, strengthen accountable and inclusive governance, increase energy access and **build resilience to crises and climate change**. UNDP works across 170 countries and territories, impacting and improving the lives and livelihoods of millions of people.

UNDP partners with governments, development and commercial banks, financial institutions and the private sector to achieve its \$1 trillion Finance Moonshot by promoting investment towards the SDGs. UNDP work on public finance (tax, budgeting, debt and insurance) and private finance, including SDG Impact Management and Measurement, has contributed to aligning over \$200 billion investment in the SDGs in 2023.

UNDP Insurance and Risk Finance Facility – IRFF

The Insurance and Risk Finance Facility is the technical arm of UNDP **leveraging the role of insurance and risk finance in protecting and enabling development**. The Facility, through UNDP Country Offices, contributes to the integration of insurance and risk finance into governments' development agendas with the goal of achieving the SDGs.

The IRFF is currently working in 34 countries. It works with the insurance ecosystem, partnering with insurers, reinsurers, brokers and industry partners including the Insurance Development Forum, and together with governments, to leverage insurance industry expertise, resources and networks to build the financial resilience of communities and countries all over the world. The Facility's work goes beyond insurance supply and demand. It works with regulators and policymakers to examine the development of legislation, regulatory and institutional capacity, and invests in advocacy and consumer education.

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