Agriculture and Food Insecurity Risk Management

Background and Context

The African Union Development Agency (AUDA-NEPAD) is in the early stages of implementing the Agriculture and Food Insecurity Risk Management (AFIRM) project. The project's objective is to empower producers, especially smallholder farmers (SHFs), to use effective tools, to benefit from investments in infrastructure and, thereby, to better manage agricultural and food insecurity risks. This objective, which contributes to sustainable growth in agricultural output and productivity, is well aligned with the overarching goals of the Malabo Declaration on Accelerated Agricultural Growth and Transformation for Shared Prosperity and Improved Livelihoods, which was adopted by African Heads of State and Government at the 23rd African Union (AU) Summit in 2014.

A long-term structural shift in approach from crisis management to effective risk management, as anticipated under AFIRM, will contribute to reducing food insecurity and transforming rural livelihoods in Africa. AFIRM focuses on investments in strategic rural physical infrastructure as well as capacity building to reduce risk exposure through resilience building and adaptation of livelihoods. It fosters risk transfer, mitigation and sharing through various tools such as insurance mechanisms, contract farming and access to finance. AFIRM also enhances risk coping using available and complementary assets as well as changing behaviour. These investments build on actions implemented under the Platform for Agricultural Risk Management (PARM) in eight African countries, with AUDA-NEPAD AFIRM being a core partner.

PARM actions include national-level risk assessment studies to identify and prioritise agricultural risks; feasibility studies to identify promising agricultural risk management (ARM) tools which can be replicated and / or scaled up, and capacity development in ARM for smallholder farmers. AFIRM projects, in consonance with PARM activities, will directly contribute to attainment of several of the Malabo Commitments, in particular to Commitments 2 to 6 – as demonstrated in Section 3.

KEY MESSAGES

Managing agriculture and food insecurity risks is critical to ensuring inclusive growth and greater resilience for Africa's economic development and transformation. It requires mainstreaming agricultural and food insecurity risk management in policy documents and translating the policies into holistic action plans which are designed and implemented by national and local governments farmers' organisations and other national stakeholders. The AFIRM programme will contribute to this by ensuring that specific investments in physical infrastructure, institutional infrastructure and capacity development leverage and reinforce a combination of effective risk management tools and policy instruments. Investments by other donors should be similarly aligned to this focus.

Main Challenge: Agricultural Risks Impeding Growth and Exacerbating Food Insecurity

Risks which are prevalent in agricultural value chains, including at farm level, are hampering efforts to boost output and productivity across the agricultural sector. As illustrated in Table 1, these include natural risks related to weather and crop and livestock pests and diseases. Also prevalent are market and policy risks. Infrastructural constraints, meanwhile, are often known about and can therefore not be described as risks, even though they tend to accentuate the negative effects of risks, leading to high economic losses. In Uganda, for example, the total annual value of losses triggered by agricultural risks ranges

Type of risk/challenge	Examples
Weather risks	Drought, flood, and erratic rainfall (increasing in frequency and severity across Africa due to climate change).
Crop and livestock health risks	Crop and livestock pests and diseases (incidence and severity of these risks sometimes due to weather risks).
Human health risks	Affects availability of family labour and household resources invested in farming activities.
Market risks	Uncertain access to quality inputs, which directly affects farm output.
	Price volatility and unpredictable access to output markets.
Policy risks	Disabling macroeconomic and trade policies as well as lack of supportive regulatory framework for risk management tools.
Infrastructure constraints	E.g. poor rural road infrastructure and lack of storage facilities contribute to high postharvest losses.

Table 1: A typology of risks facing African agriculture.

between US $600 and $800 million. A shortfall in available grain storage capacity in the country can leads to high post-harvest losses, estimated at about US $100 million per annum. In Ethiopia, meanwhile, farm output losses due to extreme drought in an El Niño season can be as high as US $925 million, and the total value of annual post-harvest crop losses is estimated at about US $430 million.

Such agricultural losses imply reductions in food availability, increasing the risk of food insecurity at household and national levels. Agricultural risks stifle the supply of finance to smallholder farmers, making it difficult for them to acquire technologies which can boost yields or reduce postharvest losses. This is, in part, why agricultural productivity growth in Africa lags behind the rest of the world.

Structural constraints such as poor road infrastructure, quality variability and high costs of aggregation also make it difficult for food-deficient countries to rely on regional trade when managing shocks to their supplies while simultaneously enabling surplus producers to mitigate the risk of glut. This often leads to reliance on imports from global food markets, increasing vulnerability to transmission of global price shocks into domestic markets, as happened during the 2007–08 food crisis.

A challenge for policymakers is how to respond to agricultural and food insecurity risks in a way that is appropriate, sustainable and entails minimum trade-offs in terms of other development goals, including those covered by the Malabo Commitments.

Recommendations for Anchoring Agriculture and Food Insecurity Risk Management within NAIPs

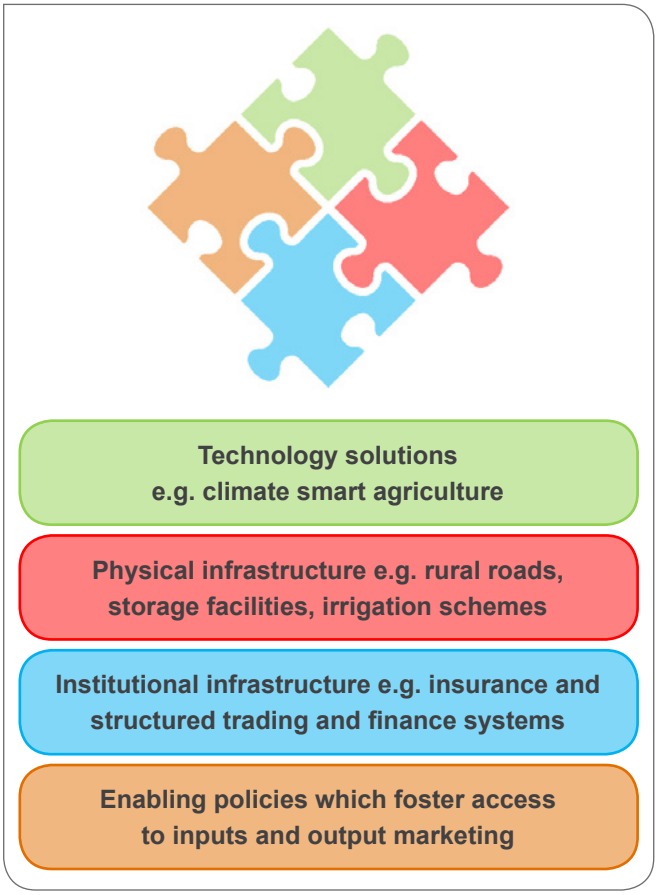

Figure 1: A holistic approach to implementing Agriculture and Food Insecurity Risk Management (AFIRM).

A holistic approach to promoting Agriculture and Food Insecurity Risk Management (AFIRM) is informed by evidence and lessons from projects such as the Platform for Agricultural Risk Management (PARM) and the European Union-funded Farm Risk Management for Africa (FARMAF) Project. Evidence from these initiatives indicate that smallholder farmers benefit from the AFIRM programme's promotion of mutually reinforcing interventions rather than actions aimed at mitigating specific risks in isolation. For instance, technological solutions such as climate-smart agriculture can sustain output growth in the face of climate variability (cf. Knowledge Note: Climate-Smart Agriculture) but the gains enjoyed by smallholder farmers can be further optimised if there are complementary investments in physical and institutional infrastructure, which improve output markets, made available to them.

The design of the AFIRM programme and its fundamental implementation strategy are consistent with this holistic approach, stressing synergies between various AFIRM components which are promoted in line with national priorities. Two cases from implementation of the FARMAF Project in Burkina Faso and Zambia are profiled below so as to illustrate this holistic approach.

BURKINA FASO

An existing small-scale inventory credit scheme, which exclusively targets SHFs and is termed Warrantage, was scaled out into 'greenfield' communities, in which there had been no previous pilots. As in many pilot projects, small warehouses (60-tonne capacity) were built, but benefiting from the additional innovations of (i) packaging inventory credit with crop insurance, bundled with production loans, (ii) fostering access to a reliable market information system (MIS) to improve output marketing by SHFs, and (iii) a grain quality assurance system (QAS) which enables SHFs to sell directly to formal buyers (such as WFP and SONAGES who are keen to stock public grain reserves) in addition to large-scale grain traders.

The outcomes after five years included increased supplies of finance from micro finance institutions (MFIs), which enabled the participating farmers to scale up their grain production, smoothen consumption, ensure food availability during the hunger season, invest in income-boosting activities such as livestock fattening for sale, and expanding production of non-food cash crops such as cotton. Overall household incomes of participating farmers rose by 35-45%. Rising local demand for warehousing services even triggered private investment in larger storage facilities – for example, a private investor built three 500-tonne capacity warehouses close to the FARMAF pilot warehouse in the rural community of Bobo Dioulasso.

ZAMBIA

The key pillars of this pilot programme included 'cashless lending' – by which financiers directly pay suppliers of quality inputs. This lending is bundled with insurance (without premium subsidies) and also includes secured forward contracts for sale of farm outputs. Reducing credit risks to the farmers in this way made it possible for the participating commercial bank to lend under highly competitive terms – ie. only two percentage points above base rate. Over 45,000 farmers benefited and the success recorded encouraged the government of Zambia, in 2017, to scale up access to weather-indexed insurance to approximately 1 million farmers under its Farmers Inputs Support Programme (FISP). This was seen as part of a governmental effort to create a long-term 'exit strategy' from FISP.

The two examples cited above show how strategic investment under AFIRM, in synergy with actions to promote a combination of risk management tools and policy instruments, can directly contribute to the following Malabo Commitments:

- **Commitment 6:** Strengthening resilience of rural communities by ensuring food availability through increased output and better storage (post-harvest handling);
- **Commitment 3:** By complementing the above with safety nets for vulnerable populations and strengthening early warning systems, contributing to ending hunger in Africa by 2025;
- **Commitment 5:** Boosting intra-African trade in agricultural commodities and services;
- **Commitment 4:** Halving poverty through inclusive agricultural growth and transformation as household income resulting from the AFIRM actions; and
- **Commitment 2:** Driving sustainable increase in the supply of inclusive finance in agricultural value chains by promoting tools which reduce lending risks.

In order to achieve these Commitments, governments need to mainstream AFIRM in national agricultural development polices and, even more crucially, translate such policies into specific action plans which strengthen and / or broaden available AFIRM interventions. Policy focus needs to shift, from short-term actions which address the effects of risks, to long-term holistic AFIRM programmes which incorporate, among others, a bottom-up approach in programme design and implementation, ensuring the involvement of local government bodies and farmers' organisations. Gender mainstreaming also needs to be stressed in order to avoid the unintended marginalisation of women as risk reduction and consequent increased access to resources catalyses commercialisation of agricultural value chains.

The supply of both public and private AFIRM interventions should be promoted, complemented in both cases by enabling policy and regulatory actions by governments. Donors' investments in this area should also be aligned to the strategic national action plans adopted by governments. Finally, it is proposed that the CAADP Biennial Review process is used to assess the commitments to, and quality of, governmental and private investments to develop AFIRM tools which are accessible to SHFs.

Further Information

- AfDB (2017). *Africa's Agricultural Commodity Exchanges, Warehouse Receipt Systems and Standards*. African Development Bank. - *View*
- AGRA (2016). *Africa Agriculture Status Report 2016: Progress towards Agricultural Transformation* AGRA: Nairobi. ISSN: 2313-5387. - *View*
- FAO (2016). Demeke M., M. Kiermeier, M. Sow and L. Antonaci (2016). *Agriculture and Food Insecurity Risk Management in Africa. Concepts, lessons learned and review guidelines.* Food and Agriculture Organization of the United Nations: Rome. - *View*
- FAO (2016). *Agriculture in Sub-Saharan Africa: Prospects and Challenges for the Next Decade*. Food and Agriculture Organization of the United Nations: Rome. - *View*
- AUC and NPCA (2016). *Country CAADP Implementation Guidelines under the Malabo Declaration.* African Union Commission and NEPAD Planning and Coordinating Agency. - *View*
- PARM (2015). *Agricultural Risk Assessment Study: Uganda.* Platform for Agricultural Risk Management: Rome, October 2015. - *View*
- PARM (2016). *Agricultural Risk Assessment Study: Ethiopia.* Platform for Agricultural Risk Management: Rome, December 2016. - *View*

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