

Feasibility study on agricultural insurance for oilseed farmers

The purpose of this brief

This brief captures the principal findings of a feasibility study conducted on climate-related agricultural insurance for smallholder oilseed farmers in northern Uganda. The goal of the study was to investigate the risks and challenges facing the farmers and the stakeholders who work with them, and to assess the extent to which the risks could be managed and mitigated through agricultural insurance.

The overall objective of the feasibility report was to gather data and analyse the current state of agricultural insurance in the country to provide concrete recommendations for the design and distribution of future insurance products and schemes.

The study was completed in March 2020 by Pula Advisors Gmbh for the INSURED programme (Insurance for Rural Resilience and Economic Development), which is financed by Sida (the Swedish International Development Cooperation Agency). The study feeds into ongoing implementation work by INSURED in the context of IFAD's country programme for Uganda, which includes the recently completed Vegetable Oil Development Project Phase 2 (VODP2) and the upcoming National Oilseeds Project.

The brief shares the main conclusions of the study, together with pointers for future work, in order to inform donors, governments and other development actors working in the field of agricultural insurance. The full study is available on request from insured@ifad.org.

Setting the scene: the Ugandan agricultural sector, smallholder farmers and oilseeds

Agriculture is the mainstay of the Ugandan economy: it contributes 23 per cent of GDP and employs over 70 per cent of the working age population. Most Ugandan farmers are smallholders, with landholdings averaging 0.8-1.6 hectares. Production is largely subsistence-oriented, low input and rainfed.

Within the agricultural sector, oilseeds have been identified as a strategic commodity by the Government, driven in part by the achievements of IFAD-supported projects. The oilseed industry has clear poverty-reduction potential and is expected to make a significant contribution to the transformation of smallholder farming from subsistence to commercial farming.

Research shows that production is generally lucrative for smallholders in the country and increases their incomes. Furthermore, oilseed producers are well supported by an integrated network of major offtakers and processors, NGOs and multilaterals. These stakeholders make inputs available, provide technical advice and extension services, and help farmers aggregate their produce effectively. Oilseeds are seen as a high-impact crop for smallholder farmers because of their short cropping cycle, limited input requirements and relatively high return on investment.





Despite the centrality of agriculture to the Ugandan economy, total factor productivity has been negative for the past 20 years. Drought, unpredictable rainfall, pests and diseases are some of the major factors that have significantly contributed to this negative growth. Average temperatures in Uganda have increased by 1.3°C since 1960, and could rise by up to 2.5° by 2050. Ugandan agriculture is highly vulnerable to current and impending climate risks, which have already resulted in losses of 10-14 per cent of agricultural production, and as much as 3 per cent of GDP. Northern Uganda is particularly exposed and has experienced critical losses in recent years as a result of drought.

Scope and focus of the feasibility study

The study used desk and field research methods, with a primary focus on smallholder oilseed farmers and associated value chains in northern, eastern and mid-western Uganda, which include the driest and poorest areas of the country.

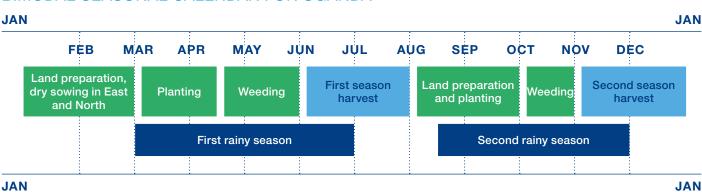
Focus group discussions (FGDs) were held with over 200 producers from farmers' cooperative groups in the regions of Lira, Kiryandongo,

TYPICAL OILSEED FARMER JOURNEY BIMODAL SEASONAL CALENDAR FOR UGANDA Masindi and West Nile. The groups were linked to the IFAD-supported VODP2. Their members were primarily producers of soybean and sunflower, and some also grew sesame (*simsim*) and groundnuts. Over 50 per cent of the participants in the FGDs were women.

What risks and constraints do oilseed farmers face and how do they manage them?

Overall, the farmers interviewed cited weather as their top production challenge, with both drought and excessive rainfall the biggest threats to their productivity. Pests and diseases were also major concerns for the smallholders, including army worms, grasshoppers and weaver birds, which could wipe out an entire harvest of sunflower crops. In the FGDs, farmers reported that their incomes were often impacted by shocks and unexpected events. In drought conditions for example, sunflower disease could reduce their income from sunflower production by as much as 90 per cent.

When questioned in detail about bad seasons, farmers talked of difficulties paying household bills, including school fees, and of servicing loans.



TYPICAL CHALLENGES FACED BY OILSEED FARMERS AT VARIOUS STAGES OF THE PLANTING CYCLE (SUNFLOWER AND SOYBEAN)

Pre-planting

Planting

- High cost of inputs

- High cost of borrowing (as much as 10% monthly interest in VSLAs)
- High cost of land clearing due to lack of access to tractors and mechanization tools
- Counterfeit seeds

1-1.5 **MONTHS**

1-2 MONTHS

- Failed germination (lack of rain or bad seed)
- Pests (grasshoppers)
- Excessive weeds
- Fungal diseases

Mid-season (weeding and monitoring) 1-1.5 MONTHS

- Pests and diseases
- Excessive rainfall during crop maturation, which lowers yield
- Excessive weeds

Harvest

 Weaver birds eating sunflower seeds, requiring labourintensive monitoring of fields

2 MONTHS

- Heavy rains at harvest

Post-harvest

VARIABLE

- Harvest with low oil content
- Lack of drying and storage facilities
- Development of aflatoxins in harvest due to poor storage, especially of sunflower
- Post-harvest pests
- Lack of access to ready markets
- Price fluctuations/ drop in sale price
- Predatory behaviour by middlemen who offtake grain at below fair market value



As a result, they were often forced to take out livelihood loans at high rates of interest from village savings and loans associations (VSLAs) or to engage in other small businesses, but they did not consider these to be meaningful alternatives. Importantly, farmers noted that the effects of income and livelihood shocks are compounded from season to season as earnings are diverted to service past debts.

Existing research indicates that farmers also respond to shocks by liquidating assets and taking children out of school, school fees being one of their highest recurring expenditures. These coping mechanisms contribute to reinforcing chronic poverty by reducing savings, limiting education and diminishing productive assets.

A map of a "typical oilseed farmer journey" was created showing the key challenges faced by farmers at each stage (see page 3).

Agricultural insurance in Uganda

Insurance penetration in Uganda is still low, and mostly concentrated in the motor and health industries. Insurance for stakeholders in the agricultural sector is relatively new and schemes were failing to scale up until the Government intervened in 2016, setting up the Uganda Agriculture Insurance Scheme (UAIS). This is a five-year insurance subsidy programme with a focus on crop, livestock and fisheries farmers in high-risk zones.

The UAIS is a public-private partnership between the Government of Uganda, represented by the Ministry of Finance, Planning and Economic Development, and the private sector. The private sector implementer is the Uganda Insurers Association through the Agro Consortium (AIC), a co-insurance pool with 11 insurance companies licensed to underwrite agricultural insurance.

Under the scheme, the Government allocated UGX 5 billion (US\$1.4 million) to subsidize agricultural insurance for farmers at 30-80 per cent of the cost of premiums depending on farm scale and location. By March 2019 after 18 months of operation, the UAIS had insured more than 77,000 farmers. Although the vast majority of subsidy beneficiaries have been smallscale farmers, insurance uptake has been lowest in the poorest northern and eastern regions of the country.

The oilseed farmers' perceptions

FGD sessions with the smallholder oilseed farmers indicated that their understanding of how insurance works was not strong. The facilitators therefore explained with reference to local forms of risk mitigation – such as *chana pora atura*, a group savings method to support members in case of a death in the family. Once they understood, farmers were largely positive about insurance and willing to pay for it. They wanted to know how much it would cost and how they would access it. A price of UGX 17,000 (US\$4.85) per acre (before subsidies) was tested and farmers found this acceptable. Further work is planned to verify these findings.

The study underlines the following key observations in relation to the farmers:

- More training is needed to educate the smallholders about insurance, to build trust that it will pay out, and to clarify the benefits and the limits of insurance.
- Farmers' concerns over basis risk (the difference between the loss experienced and the payout triggered) need to be addressed and the smallholders want to fully understand how payouts are determined in practice.
- There is confusion between savings and insurance – some farmers think of insurance as a savings tool rather than a risk mitigation tool, expecting premiums to be reimbursed if they do not claim.
- The farmers are willing to take out insurance as organized groups, rather than as individuals.

Women and insurance

In addition to FGDs with farmers of both sexes, discussions were also held with women-only groups to understand their needs, opinions and constraints. The women were positive about insurance and understood its benefits. But they have little say in what household income is spent on and therefore generally need permission from a male family member to buy insurance. Some women also reported that their male partners were irresponsible with money and disagreements about spending priorities sometimes led to domestic conflict. This indicates that decisions about insurance should be made at the group level to avoid exposing women to potential conflict.



INSURED

is a US\$6 million programme financed by Sida (the Swedish International Development Cooperation Agency) and implemented by IFAD through the Platform for Agricultural Risk Management (PARM). The five-year programme's goal is threefold:

- increase the resilience of poor rural households in the face of climate risks
- build their capacity to manage risks
- strengthen their livelihoods.

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January 2021

Key findings from other stakeholders in the oilseed value chain

With the data gathered and feedback from public and private sector actors – including insurers, banks, offtakers, digital platforms and value chain experts, the following key findings were highlighted:

- There is clear policy-level momentum for agricultural insurance in Uganda. The new Agriculture Finance Policy includes provisions to scale up agricultural insurance, with a target of quadrupling uptake to 300,000 smallholders by 2022.
- Government focus is now on area yield index insurance (AYII), which the feasibility study also identified as the most appropriate model for the smallholder oilseed farmers in the selected regions of northern and midwestern Uganda. The Government plans to spend US\$15.9 million on AYII rollout over the next five years.
- There is sufficient demand to justify the development and distribution of a tailored insurance product, and farmers' income and savings, combined with government subsidies, would be sufficient to meet the cost of insurance.
- The benefits of introducing agricultural insurance to this segment of the Ugandan market would be felt across the oilseed value chain.

Distribution and delivery channels were an area of particular concern:

- Diverse stakeholders agreed that bundling insurance with loan products was the most promising method of delivery to the smallholder oilseed farmers, who use loans to increase working capital for production.
- Low-cost uninsured governmentsubsidized loans were identified as a bundling vehicle.

Offtakers, credit providers and digital platforms were listed as potential delivery channels. Offtakers interact regularly with an extensive network of oilseed cooperatives throughout the season; credit providers are also important to farmers and are themselves interested in expanding their footprint and in adding insurance to their loans; and 41 per cent of the farmers interviewed owned mobile phones, with many using them to digitally access financial services.

THE PROPOSED INSURANCE PRODUCT

The AYII product proposed for further development and testing - within the context of ongoing implementation work funded by INSURED – insures groups of farmers against pre-set benchmark yields for oilseeds within pre-defined unit areas of insurance (UAIs). Benchmarks are based on actual historical yields within the UAI. The cover can insure the value of inputs purchased by the smallholders against low yields, as well as their expected yield income. At the end of the season, following crop cuts by trained enumerators, farmers receive compensation if yields in their agroecological zone are below 65 per cent of historical yields. The following risks are covered: drought, windstorm, frost, excessive rainfall, plant diseases and pests, excessive heat wave, hail and floods.

The feasibility study concludes by looking in detail at the AYII product designed for smallholder oilseed farmers in northern and mid-western Uganda. Planned preparatory activities include sensitization, partnershipbuilding, product approval and testing, and onboarding and training of farmers and value chain partners.