

# LESSONS LEARNED AND GUIDANCE NOTES ON ZAMBIA – THE ADOPTION, PERCEPTION, AND UNDERSTANDING OF AGRICULTURAL INDEX INSURANCE



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In this review exercise, the independent research team, WuR, carried out a farmer survey and interviewed a select group of stakeholders from farmer organizations, insurance companies, brokers, distributors, data providers and regulators. The outcomes and insights of this in-depth analysis held in Zambia will be shared in a 90-minute session.



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 **Wednesday June 1, 2022**  
 **1:30 - 3:00 PM (Zambia Time)**  
 **Virtual Session**

Email Sandra Carrollo [scarrollo@ifc.org](mailto:scarrollo@ifc.org) if you would like to attend this session. Thank you

**Hosted by:**  
**Global Index  
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# Global Index Insurance Facility: Lessons learned and Guidance Notes - the Adoption, Perception, and Understanding of Agricultural Index Insurance. The case of **Zambia**

*Dissemination of results, online webinar, 1 June 2022*



# Acknowledgements

The report captures the Program's current status, the progress it has made in Kenya, Senegal and Zambia, lessons learned over the years under implementation and guidance notes for its next steps.

These notes and lessons learned are the result of joint efforts, hard work and commitment with GIIF's implementing partners on the ground as well as generous support from the donors.

The findings, interpretations, and conclusions expressed in this report are entirely those of the authors. They do not necessarily represent the views of IFC/the World Bank and its affiliated organizations.

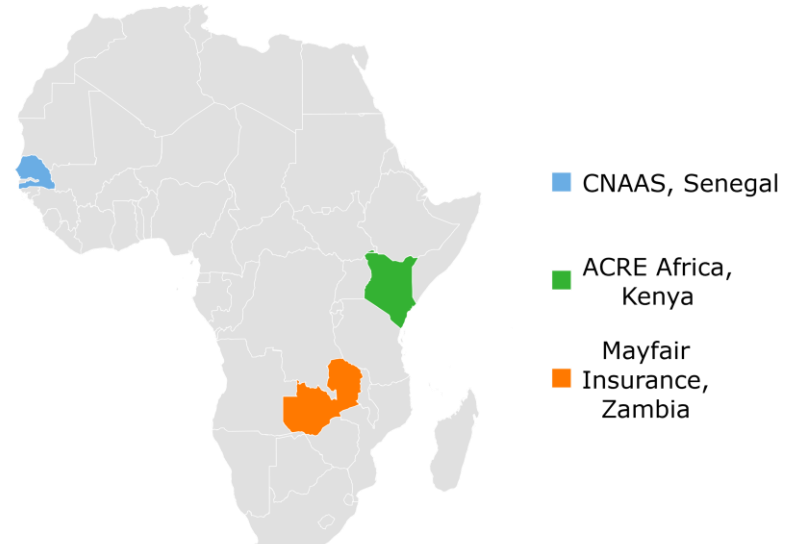
# Why this study?

- **Agricultural risks:** farmers and agricultural value-chains are faced with important risks and uncertainties. These can lead to vulnerability of rural livelihoods, to underinvestment in agriculture and to limitations in food sovereignty and agroeconomic growth.
- **Insurance:** agricultural insurance is one of the tools to manage agricultural risk. But classical indemnity-based insurance is too costly to apply for smallholders. Index insurance is a promising alternative.
- **Challenges:** agricultural index insurance (AII) seems to have challenges with farmers' acceptance, understanding and adoption. It is essential to better comprehend these challenges and their possible solutions.

# Introduction to study goals

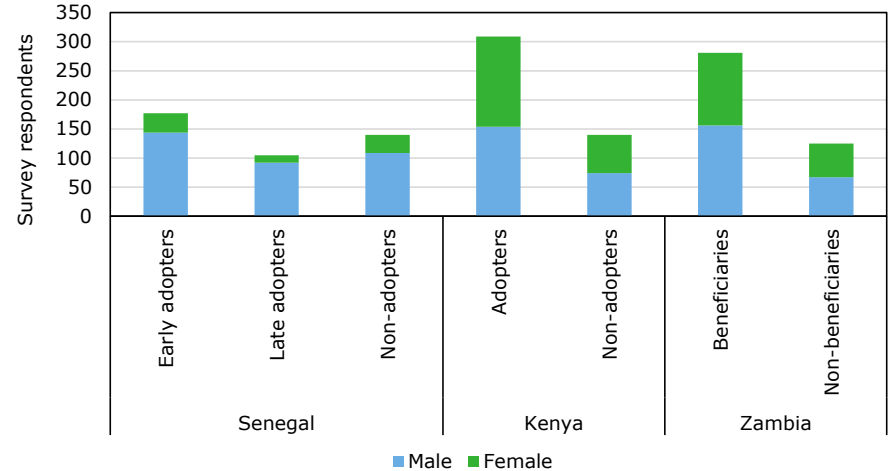
1. Adoption, Perception and Understanding of Agricultural Index Insurance
  - Drivers of adoption (for farmers, for aggregators)
  - Farmers' understanding of AII
  - Farmers' perception of AII
2. Feedback on GIIF's country program

Case studies



# Methodology

- Review of program documents
- Portfolio analysis
- Farmer level survey Zambia
  - 281 beneficiaries and 125 non-beneficiaries
- Interviews with stakeholders
  - GIIF staff, implementing partner, insurance companies, insurance brokers, aggregators, farmer leaders, government/regulator, sector projects.
- Focus on one specific AII product per country.



# Three different programmes

	<b>CNAAS Senegal</b>	<b>ACRE Kenya</b>	<b>Mayfair Zambia</b>
Type of company	State insurance company	Development company / broker	Private insurance company
Range of products	WII (RFE and RET)	WII, MCPI (previously also AYII)	WII, AYII
Distribution	Banks, MFIs Agribusiness Producer orgs. NGOs/projects	Agribusiness Banks, MFIs Digital platforms Village Advisors	FISP/MinAg MFIs Agribusiness WFP
Compulsory?	Compulsory with credit	Voluntary	Compulsory with input subsidy
# farmers (all-time high)	269,000 (2019)	178,000 (2014)	1,033,524 (2018-19)
Premium subsidy?	50% govt subsidy	Only in projects or state programs	None

# Three different products researched

	<b>CNAAS Senegal</b>	<b>ACRE Kenya</b>	<b>Mayfair Zambia</b>
Product	Groundnut insurance	Bima Pima	FISP
Technology	WII	WII	WII
Compulsory?	Compulsory with credit	Voluntary	Compulsory with FISP input subsidy
# farmers (latest)	83,107 (2018)	3,994 (2021)	874,519 ('19-20)
Premium	8% (of which 50% is subsidized)	10%	5.9%
Per farmer	US\$ 110-160/ ha insured US\$ 6.50-6.80/ha premium	US\$ 27-45 insured US\$ 3-5 premium	US\$ 80.23 insured US\$ 4.72 premium

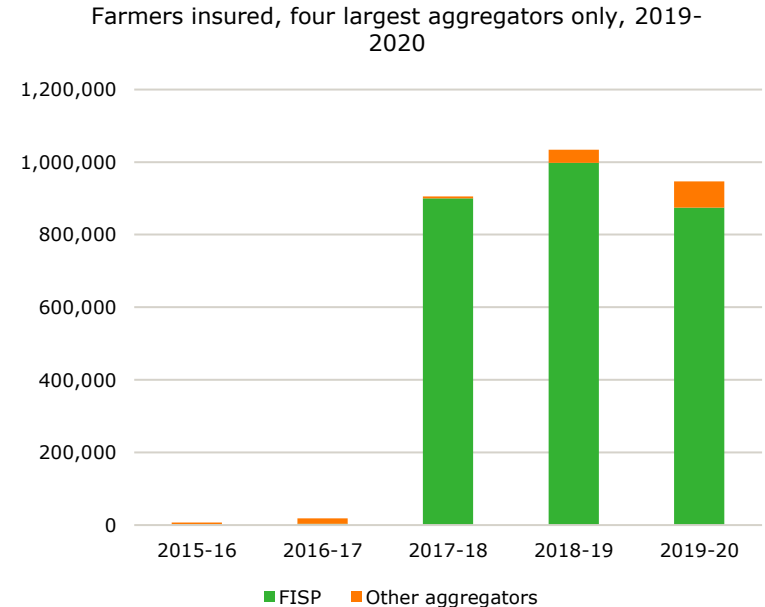


# GIIF's country program in Zambia

- GIIF's work on index insurance in Zambia took off with its support to Mayfair Insurance in 2016.
- Support to Mayfair Insurance (2016-2020) included:
  - Grant contract used a.o. for hiring dedicated index insurance specialist
  - Technical assistance and training
  - Stop-loss facility

# Evolution of the agri-insurance portfolio (1)

- Mayfair's outreach among farmers has grown enormously.
- Portfolio amounts increased radically, when insurance was included in the FISP program.
- The sum insured per farmer for FISP is mid-range, compared with other aggregators. The purchasing power value of the sums insured and the premiums are decreasing because of severe inflation in Zambia.



# Evolution of the agri-insurance portfolio (2)

- Outside the FISP portfolio, the premium income tripled as a consequence of higher sales through one of the agribusiness aggregators and the arrival of a large microfinance institution as a new substantial client.
- These aggregators more than compensated the decline in turnover from some older clients, although they are still far from achieving the portfolio amounts of the FISP portfolio.

# Insurance in the FISP programme

- FISP is the Farmer Input Support Program of the Zambian Ministry of Agriculture.
- The government provides a subsidy equivalent to roughly 81% of the cost of the inputs (fertilizer and seeds) to smallholder farmers cultivating 1-5 ha.
- Farmers pay ZMW 400 contribution, of which ZMW 100 is mandatory insurance premium.
- The insurance product is a weather index insurance covering drought and excessive rain in three seasonal covers: early dry spell, late dry spell and excessive rain.
- The insurance covers the inputs bought with the subsidy.

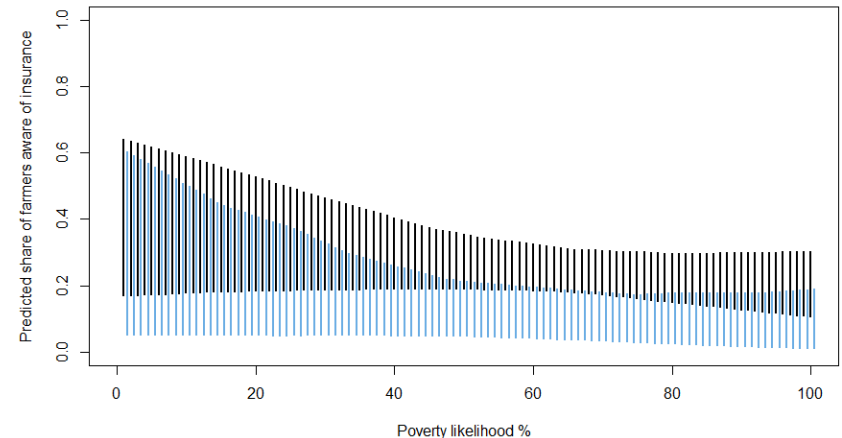
# **Relevance:** is AII addressing the problem at hand, and who is benefiting?

- The main beneficiaries of agricultural index insurance in Zambia are smallholders, both semi-commercial and commercial.
- The most prominent agricultural risks are weather-related, and drought is the most experienced shock.
- The required financial contribution of farmers for the FISP programme is relatively high compared to the average expenditures on inputs.
- Beneficiaries and non-beneficiaries are similar in terms of several characteristics.

# Effectiveness: adoption, understanding and awareness of the AII product

- Mayfair has taken several actions for awareness raising throughout the years, but knowledge and awareness about index insurance is limited.
- Farmers with a higher poverty probability score and farmers from female headed households are less likely to be aware of the FISP index insurance component.
- Reasons for the deficiencies in farmer's understanding could be related to both the on-boarding as well as the pay-out phase of the insurance , and to the compulsory character of the insurance.

Predicted share of farmers who are aware that FISP includes index insurance, by poverty likelihood and benefiting from FISP



- 95% confidence interval for beneficiaries
- 95% confidence interval for non-beneficiaries

# Coherence: active actors and projects in AII and their compatibility

- The Zambian government has taken a positive attitude towards agricultural index insurance, shown especially in the adoption in the FISP programme.
- Besides GIIF, several other donors and projects have been active in agricultural index insurance.
- Coordination of donor and stakeholder efforts took place in the early phases of index insurance development in Zambia, through a Technical Advisory Group for Microinsurance.

# Efficiency: cost levels and cost-effectiveness

- Profitability of crop insurance depends on the scale and time, and therefore the insurance related FISP is most likely highly profitable.
- (Re)insurance company navigate between two priorities in steering the loss ratio: mitigating costs and uptake and client value (for which pay-outs are necessary).
- Outreach costs are the most challenging costs in AII, therefore often left to aggregators or born by donors.



# (Envisaged) **Impact**: Theoretical impact pathways and differences between beneficiaries & non-beneficiaries

- AII is expected to encourage investment and thereby increase profits and income for farmers.
- FISP beneficiaries and non-beneficiaries have similar market penetration (sell any of their produced crops in the last twelve months) and invest similar amounts in inputs.
- There are also some limiting factors to the potential impact on the farmers:
  - The insurance covers only the costs of inputs, and not the full production costs or the harvest value.
  - In the FISP system a graduation of farmers was foreseen after three years, but this often does not happen.

# Sustainability: Future of the AII sector beyond the IFC/GIIF project

- The current scale of the market is heavily dependent on the compulsory insurance in the FISP programme, which may decrease for Mayfair because of other companies stepping in or due to implementation problems.
- Financial education of farmers around insurance remains a topic of concern for the continuity of the project.
- Outside FISP, Mayfair has been able to gradually grow its portfolio with a small but varied group of other aggregators.
- The parties offering index insurance have increased in the last few years, showing the market is developing and becoming interesting for more companies.

# Recommendations

1. Strengthen the demand side: awareness raising, information/ explanation and farmer feedback mechanisms, as well as building capacities in aggregators.
2. Focus more on marketing and business development to support and monitor an increasing number of clients aggregators.
3. More attention to sector policy, regulation and donor coordination.
4. All efforts need to work towards systemic change and sector transformation in the AII sector.

# Questions for reflection

1. How to improve the understanding, acceptance and demand for insurance? (both for FISP beneficiaries and non-FISP beneficiaries)
2. How to deal with the diminishing purchasing power value of the insurance and premium?
3. How could the insurance sector further scale up, also outside of the FISP model?
4. What should be the top three priorities to arrive at a healthy and prosperous AII sector in Zambia? And how to achieve that all actors contribute to this agenda?

# Thank you!

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# Abbreviations

Abbreviation	Name
<b>AII</b>	Agricultural index insurance
<b>ARC2</b>	Africa Rainfall Climatology, version 2
<b>CAC</b>	Camp Agricultural Committee
<b>DACO</b>	District Agricultural Coordinator
<b>DIS</b>	Direct Input Supply
<b>E-voucher</b>	Electronic Voucher
<b>FAO</b>	Food and Agriculture Organization of the United Nations
<b>FISP</b>	Farmer Input Support Program of the Ministry of Agriculture
<b>FRA</b>	Food Reserve Agency
<b>FSD Zambia</b>	Financial Sector Deepening Trust Zambia
<b>GIIF</b>	Global Index Insurance Facility
<b>IAPRI</b>	Indaba Agricultural Policy Research Institute
<b>IFAD</b>	International Fund for Agricultural Development
<b>IFC</b>	International Finance Corporation of the World Bank Group
<b>ILO</b>	International Labor Organization of the United Nations
<b>LDC</b>	Louis Dreyfus Company (formerly NWK)
<b>MCPI</b>	Multiple Peril Crop Insurance

<b>Musika</b>	Musika Development Initiatives Zambia Limited
<b>NPCI</b>	Named Peril Crop Insurance
<b>OECD</b>	Organization for Economic Cooperation and Development
<b>PIA</b>	Pensions and Insurance Authority
<b>PWC</b>	Price Waterhouse Coopers
<b>RUFEP</b>	Rural Finance Expansion Program
<b>SZI</b>	Smart Zambia Institute
<b>TAG</b>	Technical Advisory Group on Microinsurance
<b>TAMSAT</b>	Tropical Applications of Meteorology using SATellite data and ground-based observations
<b>VF</b>	Vision Finance – Microfinance Institution
<b>WFP</b>	World Food Program
<b>WII</b>	Weather Index Insurance
<b>ZIAMIS</b>	Zambia Integrated Agricultural Management Information System
<b>ZMW</b>	Zambian Kwacha
<b>ZNFU</b>	Zambian National Farmers Union
<b>ZSIC</b>	Zambia State Insurance Corporation

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