



*Micro Crop Insurance and
Protecting the Poor
Lessons From the Field*

Aaron Oxley

CTO, Micro Insurance Agency

aaron.oxley@microinsuranceagency.com

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The Program

Who are we and what do we do?

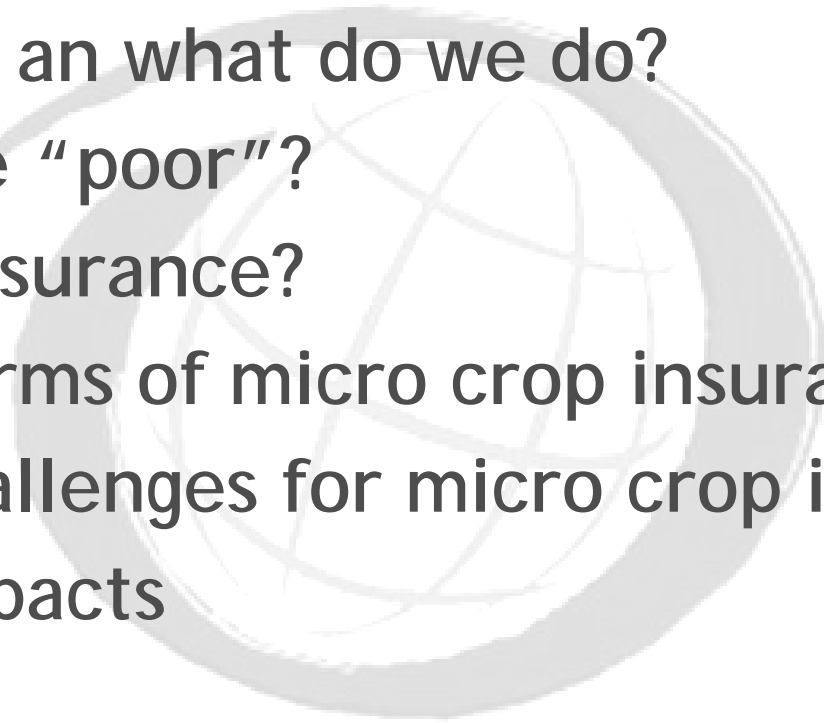
Who are the “poor”?

Why crop insurance?

Effective forms of micro crop insurance

Delivery challenges for micro crop insurance

Real-life impacts





The Micro Insurance Agency

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Who is the Micro Insurance Agency?

We are the world's first and largest global insurance intermediary focussed on serving the "Bottom of the Pyramid"

Established in 2006, we are a subsidiary of Opportunity International, one of the world's leading microfinance networks

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What is Microinsurance?



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Two Definitions

“...the protection of low-income people against specific perils in exchange for regular premium payments proportional to the likelihood and cost of the risk involved.”

- Draft Donor Guidelines, CGAP Working Group (2003)

“...not a specific product or product line. It is also not limited to a specific provider type. Microinsurance is the provision of cover to a specific market segment, i.e. low-income persons.”

- IAIS Issues Paper (2007)

A Simple Definition

Micro insurance is identical to “regular” insurance, with the addition of the word “micro” implying that products are focused on the informal sector, or mass market, or bottom of the pyramid - or, less politely, the poor

Who are "the Poor"?



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The Poor are Rural

Over 2 billion people live on less than \$2 a day, and despite the increasing urbanisation of poverty, the majority (75%) are rural

In most parts of Africa and Asia, farm sizes have a long-term trend of shrinkage through inheritance and population growth

For example, in India, farm sizes went from 2.6h (1960) to just 1.4h (2000)

(World Development Report, World Bank 2008)

Why Crop Insurance?

Agriculture has a special power in reducing poverty

“Cross-country estimates show that GDP growth originating in agriculture is at least twice as effective in reducing poverty as GDP growth originating outside agriculture”

(World Development Report, World Bank 2008)

Additionally, the poor are disproportionately affected by climate change and adverse weather

Increasing Inputs = Increasing Income

There is appetite amongst lenders to invest rurally, but the fear of drought/typhoon/storm wiping out the portfolio limits exposure

When given inputs, farm outputs can typically increase 3 to 4 times

- Yield per acre roughly doubles and can be much more
- Many farmers do not plant all their land due to lack of inputs and will increase the area cultivated

Income Allows Adaptation

Often, farmers will use their increased income to help themselves cope with risk

This is expressed through crop diversification, installation of irrigation system, and investment in non-crop income streams

This can be a highly effective way to build DRR

Micro Crop Insurance is Expensive

Most existing crop insurance is “normal” insurance
The Philippines Crop Insurance Corporation (PCIC) has a mandate to insure smallholder farmer’s crops in the Philippines

PCIC operates an “indemnity” scheme: claim forms must be filled out and losses must be inspected and verified

This model is extremely difficult and expensive to manage when the average plot size is only an acre

This is reflected in the price - up to 20% of the sum insured!

Micro Crop Insurance is Cheap

Weather Indexed Crop Insurance gets around the expensive claims filing and verification processes that make regular indemnity insurance so cumbersome

Instead of inspecting each farm, weather information from a nearby weather station is used to determine if a loss has occurred

Payouts are automatic and no claim forms need to be filled out by the farmer, so they are fast

Weather Indexing makes crop insurance affordable and effective, between 5-10% of sum insured

An Example - Drought Insurance

Typically, farmers must be within 20km of the weather station

The cover is specific to a type of crop or particular seed whose growing characteristics are well understood

If the rainfall is less than a given amount at a specified growth stage, a graduated payout is automatically triggered, dependant on the number of mm the rain is below the threshold

An Example - Drought Insurance

There is a “sowing” condition, where seeds are sown if the rain reaches a certain minimum threshold during the sowing window (e.g. 25mm in a 10 day period between 11 November and 20 January)

If there is not enough rain to trigger sowing, a full payout is triggered and the farmer keeps the inputs

An Example - Typhoon

When farmers purchase crop insurance they are linked to a known GPS location, which must be no more than 2km from their farm

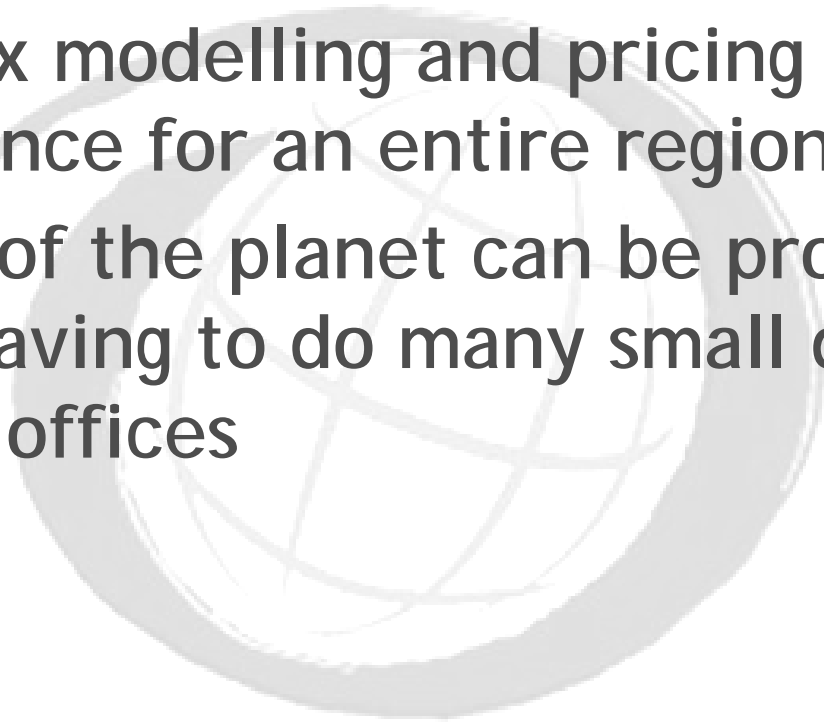
When a typhoon hits, the “Typhoon Track” is examined, checking the path of the typhoon and its windspeed

Farmers are automatically given a payout based on the severity of the typhoon and how close it passed to their farms

An Example - Typhoon

The complex modelling and pricing work can be done once for an entire region

Large parts of the planet can be protected without having to do many small deals with local MET offices



Challenges - Data

The biggest challenge is the availability of data

In order to properly price a weather indexed product, decades of data are preferred

In addition, data must be made available in a timely fashion so claims can be made

Challenges - Basis Risk

“Basis risk” is the risk of the experienced loss being different from the calculated loss

This has to be minimised through careful product design, excellent actuarial work, and the use of high quality data

It also involves customer education and expectation setting on exactly how the product works

Challenges - Insurance Capacity

Local insurance companies generally have little or no appetite for carrying crop risks

Where they do not, we help to organise reinsurance at the global level

The local company takes a small amount of risk for a small fee, but the bulk of the risk is held by a major reinsurer such as Swiss RE or Paris RE

Challenges - Partnerships

For the oft-cited Malawi drought weather indexed insurance, in the 2006/7 growing season the partners involved were:

- Project coordinator: Micro Insurance Agency
- Product pricing: World Bank's CRMG and IRI of Columbia University
- Farmers: NASFAM (Malawi's smallhold farmers union)
- Field services: NASFAM and Malawi's Ministry of Agriculture
- Providers of credit to farmers: OIBM and MRFC
- Insurers: Insurance Association of Malawi
- Maize seed providers: Monsanto
- Groundnuts seed providers: NASFAM Commercial Services
- Fertilizer providers: NASFAM Commercial Services
- Rainfall data providers: Malawi Met Offices

Real-Life Outcomes



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Harry Kafakalunda, aged 67

Harry lives in Dzoole, 60km Northeast of Lillongwe

He has a wife, 11 children, supports 3 orphans, and has 24 grandchildren

He has accessed a loan for the first time because of the availability of crop insurance

Harry Kafakalunda's Old House



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Harry's Words

“Before I joined the scheme I wasn't able to access loans and for me, farming wasn't a profitable business. Now, every year I can see improvements in my farming because I am able to buy better farm inputs.

“From struggling to survive and support my family, I am now planting two hectares of maize as well as cash crops - two hectares of tobacco and half a hectare of ground nuts. I am also going to plant cabbage and onions as extra cash crops, and I'm looking forward to being able to introduce irrigation to extend the growing season.”

Harry's Words

“The benefits for me are a better living standard, better food, I have been able to build a better house, and I have bought an ox cart from last year's earnings. This would not have been possible before.”

Harry Kafakalunda's New House



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Thank You

Questions?

Aaron Oxley

aaron.oxley@microinsuranceagency.com

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