

Importance of Data to give access to agriculture insurance to small-scale farmers, 2<sup>nd</sup> African Continental Briefing

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Agrotosh Mookerjee FIA, Principal Actuary, MicroEnsure

## **AGENDA**



1. BACKGROUND TO OUR AGRICULTURE PROGRAMS;

2. HOW DOES AGRICULTURE INSURANCE WORK;

3. DATA REQUIREMENTS FOR AGRICULTURE INSURANCE;

4. ROLE OF DIFFERENT STAKEHOLDERS;

5. RECOMMENDATIONS FOR DATA COLLECTION.

# Background to MicroEnsure



MicroEnsure: A specialist provider of insurance to the low and middle-income market with more than 10 million active clients in 13 markets across Africa, Asia and the Caribbean.

We provide a range of life, health, property and weather-index products via a range of distribution partners that include microfinance companies, banks, co-operatives and mobile network operators.



## Recent Projects world-wide



COUNTRY	DISTRIBUTION CHANNELS	CROPS INSURED	NUMBER OF FARMERS INSURED (approximate)	
ZAMBIA	Contract Farming	Cotton	7,000	
RWANDA	Linked to Lending, Farm Inputs, Farmer Cooperatives	Rice, Maize, Irish Potato	21,000	
MALAWI	Linked to Lending, farmer union, church organisation	Tobacco, Groundnut, Maize	16,000	
TANZANIA	Linked to lending, contract farming, farm inputs, NGO	Sunflower, Safflower, Beans, Cotton, Maize	2,000	
KENYA	Farm Inputs	Maize	3,000	
UGANDA, GHANA	Technical Consultancy support to instance to develop crop insurance products.	n/a		
PHILIPPINES	Input supplier	Rice	5,000	
CARRIBBEAN	Retail	Livelihood protection	1,000	

Approx. 60,000 farmers in 5 countries (Kenya, Malawi, Rwanda, Tanzania, Zambia) in Africa insured in 2013. Approx. 5,000 farmers have received payouts in 2013.

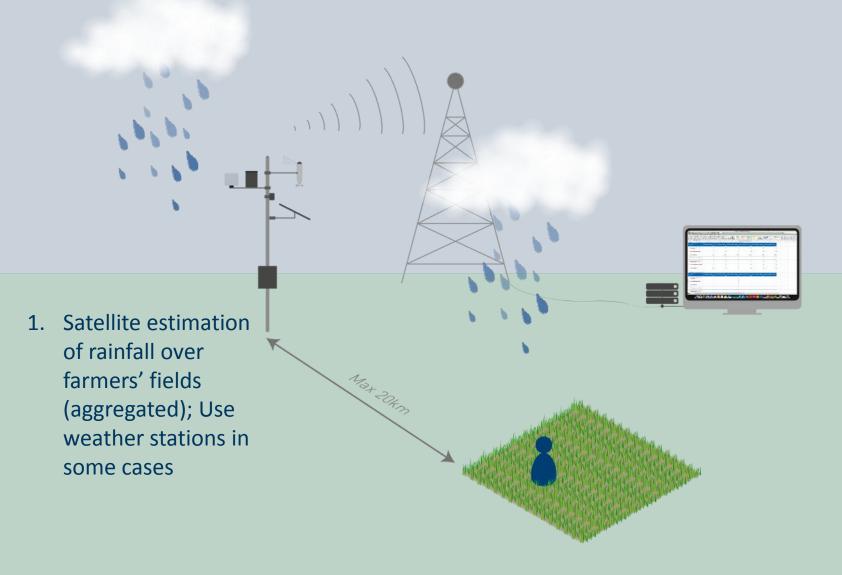
### PRODUCT TYPES



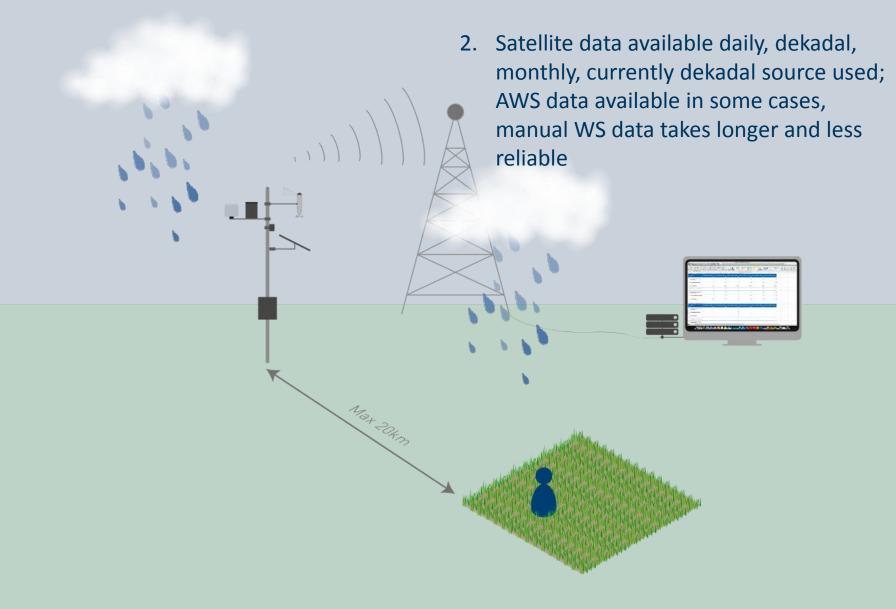
# THE DIFFERENT TYPES OF AGRI-INSURANCE PRODUCTS FOR LOW-INCOME PEOPLE

- <u>Indemnity Insurance</u>- if farmer suffers a loss (of outcome or revenue) the insurance compensates farmers;
- Weather Indexed Insurance (WII) insurance linked to weather events as measured on a certain basis (using either weather stations and/or satellite data);
- Area Yield Insurance insurance linked to the crop yield as measured officially (using crop cutting experiments, survey data etc).

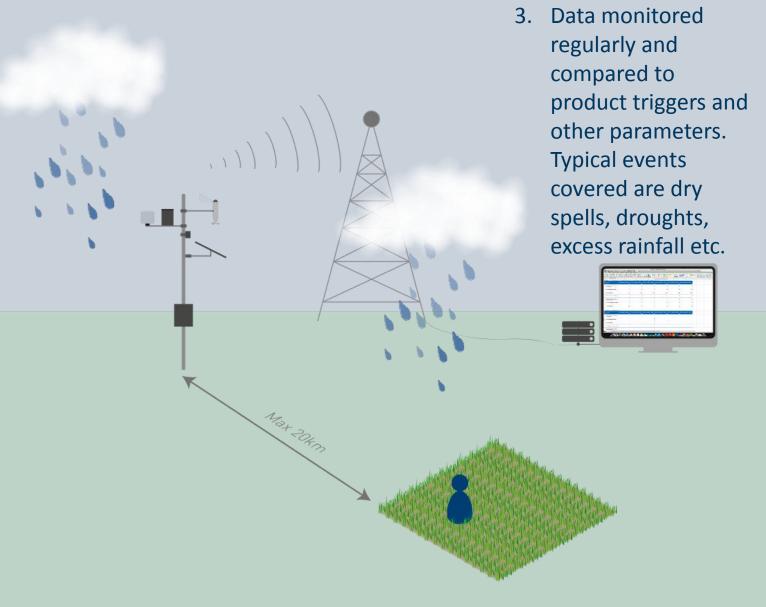
















4. Once trigger thresholds are reached, insurer notified of claim event and claim processed. In some cases, indexed payouts may be adjusted due to other conditions (e.g. underinsurance) and discretionary payouts may be made.

Scope for adding other types of agriinsurance (e.g. indemnity) if applicable. Payout usually made directly to client (not farmers).





## Main Distribution Channels



Weather Indexed Insurance (WII) linked to Agriculture Lending- sold to individual small-holder farmers & groups of farmers via Banks/ MFIs/ others.

#### **Portfolio Product**

WII sold to Institutions wanting to reduce risk of lending in agriculture sector-promotes better risk management & allows more investment in agriculture.

### **Savings linked Product**

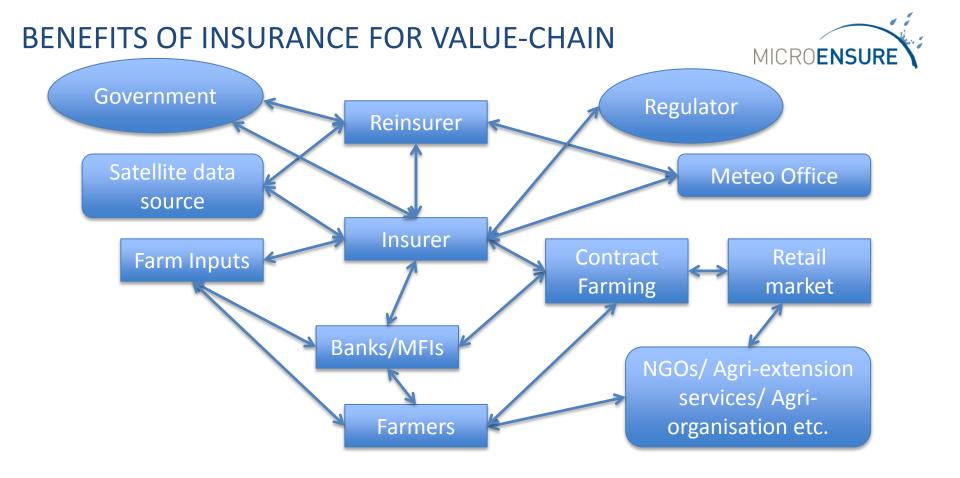
WII linked to regular savings, which incentivizes savings towards a goal, while protects customers from adverse events.

#### **Sales Promotion Product**

WII linked to farm inputs (e.g. seeds), which give increases uptake, improves ongoing loyalty & protects farmers/reduces defaults.

### **Packaged Product (Contract Farming)**

Packaged product (WII + Life + Health), which improves loyalty, reduces sideselling/ defaults & gives valuable protection for farmer and family.



### MAIN BENEFITS OF INSURANCE FOR VALUE-CHAIN MICROENSURE Government Regulator Reinsurer Satellite data Meteo Office source Insurer Farm Inputs Contract Retail **Farming** market Banks/MFIs NGOs/ Agri-extension services/ Agriorganisation etc. **Farmers**

### FARMERS/ FARMER GROUPS:

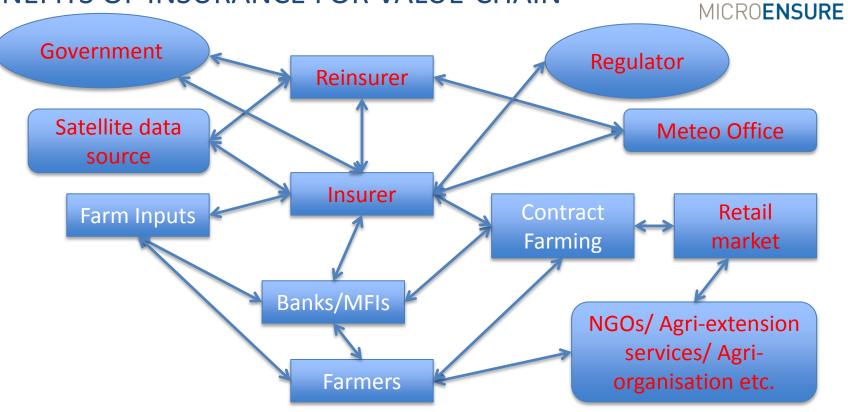
- 1) Better access to finance/ potentially better credit terms (insurance as collateral);
- 2) Lowers income fluctuation, protects livelihood, disaster relief;
- 3) Better access to farm inputs/ other extension services/ contracts;
- 4) Protects farmers from risks, which are difficult to self-insure within group;
- 5) Potentially benefit from subsidised/ free insurance with collaboration with other value-chain players;
- 6) Can assist in deciding on farming practices and decisions.

### BENEFITS OF INSURANCE FOR VALUE-CHAIN **MICROENSURE** Government Regulator Reinsurer Satellite data Meteo Office source Insurer Contract Retail **Farm Inputs Farming** market Banks/MFIs NGOs/ Agri-extension services/ Agriorganisation etc. **Farmers**

#### BANKERS, MFIS, AGRI-BUSINESSES

- 1) More loan disbursement (on risk informed basis);
- 2) Reduces portfolio lending risk;
- 3) Promote sale of inputs (marketing tool);
- 4) Reduces side-selling/more retention of farmers/more take-up;
- 5) Incentivizes more production (by rewarding farmers with free insurance);
- 6) Can differentiate themselves from competition.

### BENEFITS OF INSURANCE FOR VALUE-CHAIN



- 1) Govt- objective of increased financial access/ more investment in agriculture/ micro-disaster relief management;
- 2) (Re)Insurer- can be profitable business/ reduces overall risk;
- 3) Weather agencies- tangible use of weather data/ could charge fees for additional services
- 4) Retail buyers- can tie in with Fair Trade models/ additional benefit for farmers
- 5) Other organisations- Financial inclusion/ link to markets/ platform for further agriextension services

# Data Components and Importance



**WEATHER DATA** 

From Satellites and/or Weather Stations-Measurement of historical and live weather conditions to aid in product development, pricing, claims process

**CROP DATA** 

**GROUND-TRUTHING** 

MARKET DATA

**CUSTOMER FEEDBACK** 

**INSURER FEEDBACK** 

Crop Yield, Agronomical information, Definition of weather events, experience of bad years, locations, loss events- Need to establish link between weather conditions (or other basis of insurance) and agriculture losses. To validate product design and ensure suitability for local conditions and experiences. **Difficult to obtain** 

Volumes, taxes, charges, expenses, premium caps/floors, regulatory/political and business environment- Need to develop product in local context

Customer feedback- to fine-tune product, trade-off between price and type of product, decision making of farmer's/ agri-business's behalf.

Insurer feedback- to gauge risk appetite, technical capacity, reinsurance arrangements, solvency

Data Components WEATHER DATA **CROP DATA GROUND-TRUTHING** 

MARKET DATA

**CUSTOMER FEEDBACK** 

**INSURER FEEDBACK** 

Weather Station data

Satellite data

**Crop Yield** 

Agronomical information

Definition of weather events

Experience of bad years

Location, volumes and market info

Feedback on draft product

Risk appetite and capacity

Farmer Organisations

Aggregators (including Financial Institutions)

Governments and policymakers

Meteorological agencies

Other Research bodies

Insurers

## DATA ROLES FOR STAKEHOLDERS



	Farmer Groups	Aggregators	Govt	Research bodies	Meteorological agency	Insurers
Weather Station Data			✓		✓	
Satellite Data			$\checkmark$	✓	✓	
Crop Yield Data	✓	✓	$\checkmark$	✓		
Agronomical info	✓	✓	✓	✓		
Experience of bad seasons and losses	✓	✓			✓	✓
Info on economics, political and business context		<b>√</b>	✓	✓		✓
Feedback on product	✓	✓	✓			
Insurer appetite and capacity						✓

### **SUMMARY RECOMMENDATIONS**



- **1. Farmer Organisations** should compile crop data, agronomical knowledge and experience of bad seasons experienced and give feedback on product.
- 2. Aggregators (Financial Institutions, Agri-business, NGOs) should compile crop data, experience of agric losses and give constructive feedback on product.
- 3. Government and policymakers should create/facilitate databases for crop data and tie-up with available weather data (much of which is publicly available but sometimes in other countries). Should support set up of agriculture (e.g. tax waiver), consider macro-level weather index insurance (e.g. for disaster relief) and follow best-practice regulations.
- 4. **Research bodies and meteorological agencies** should maintain database for crop, weather and market data.
- 5. Insurance industry should actively consider underwriting strategy, build technical and operational capacity and arrange suitable reinsurance/co-insurance arrangements.
- 6. Product developers/enablers should also focus on capacity building and training local stakeholders in order to increase product understanding and facilitate data collection. Local ownership is key for sustainability.



# THANK YOU FOR LISTENING

agrotosh.mookerjee@microensure.com