

# From the field: An inside look at providing agricultural microinsurance in Ethiopia and Nigeria

CAS Annual Meeting 2020

**MicroInsurance Centre** at Milliman

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## Speakers



**Michael J. McCord**  
Managing Director,  
MicroInsurance Centre at Milliman  
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**Chukwuma Kalu**  
Head, Agric Insurance &  
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**Mariah Mateo Sarpong**  
Director of Communications and  
Knowledge Management  
MicroInsurance Centre at  
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United States

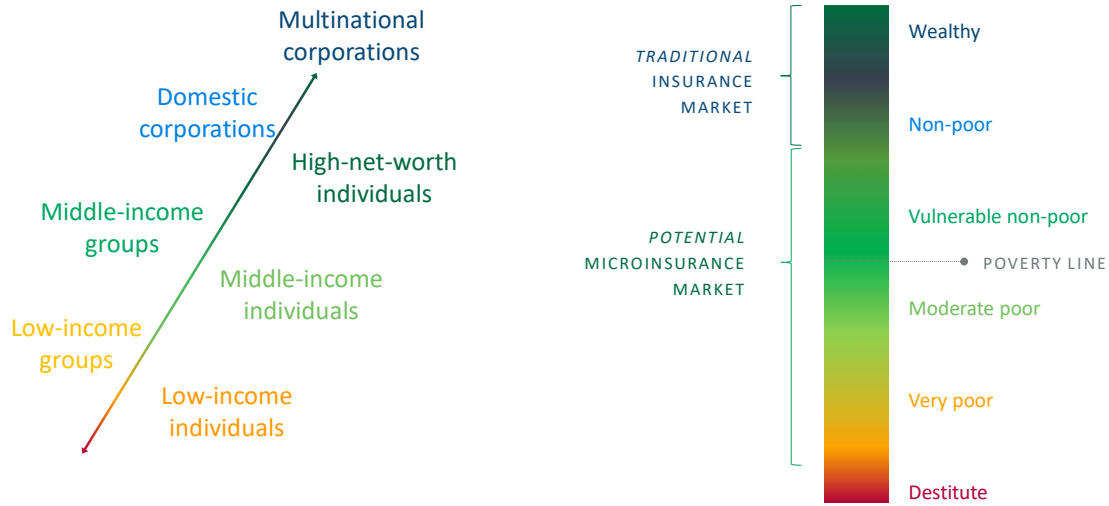


**Mebrahtu Brhan Gebre**  
Department of Agricultural and  
Resource Economics  
Mekelle University  
Ethiopia

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## The microinsurance market – 3 billion people

Emerging consumers in developing markets represent a huge opportunity for insurers



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## What risks do smallholder farmers face?



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# Developing a holistic risk management solution in northern Ethiopia

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## Who is the end client?

- PASIDP farmers
- Irrigated & rainfed crops – slightly better off
- Informal workers
- No protection against crop risks
- Income – highly volatile, seasonal; Annual ranges USD 130 – 800
- Financial services – RuSACCOs (only half)



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## Understanding the problems farmers face



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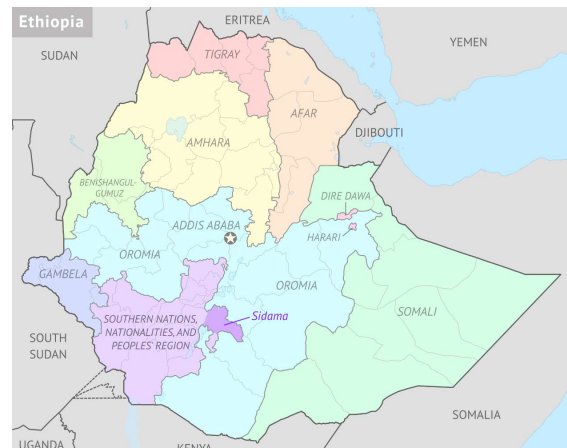
## (A) problem and its effects

### Drought



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### Tigray & Amhara



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## Solution developed

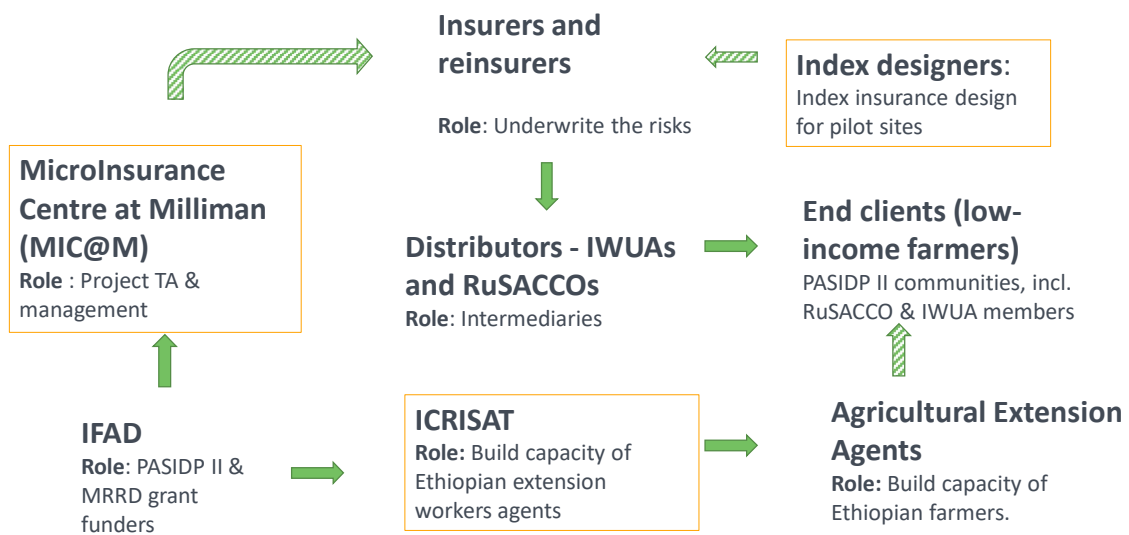
Product name	Crop index insurance
<b>Clients</b>	<ul style="list-style-type: none"> <li>▪ Smallholder cereals farmers in northern Ethiopia</li> </ul>
<b>Risks covered</b>	<ul style="list-style-type: none"> <li>▪ Drought</li> </ul>
<b>Non-insurance risk management</b>	<ul style="list-style-type: none"> <li>▪ Extension services</li> </ul>
<b>Crops covered</b>	<ul style="list-style-type: none"> <li>▪ Rain-fed crops (cereals, i.e. wheat, sorghum, teff)</li> </ul>
<b>Distribution channels</b>	<ul style="list-style-type: none"> <li>▪ RuSACCOs, and Irrigation Water Use Association (IWUAs) members</li> </ul>
<b>Premiums and sum insured (1 pilot site)</b>	<ul style="list-style-type: none"> <li>▪ Premium range between USD 5.30 – 26.60</li> <li>▪ Sum insured (max payout) range USD 44.30 – 221.60</li> </ul>

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## Partnerships



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## Product pilot 2019 – technical setup

**Drought** - rainfall estimates & enhanced vegetation index (EVI) from satellite data



Community post – satellite data

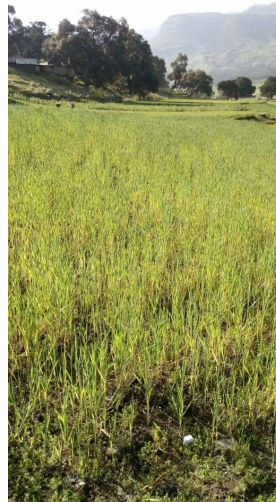


Rain gauges

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## Farmers' smart phone progression photos from the field



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## Product pilot 2019 – awareness & distribution

- **Sales:** sensitization sessions by insurer
- **Premium collection:** insurers collected premium directly
- **Pay out:** Kobo site



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Posters & brochures in local language

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## Awareness programs in Amhara pilot site

[PLAY VIDEO of sensitization in Amhara]

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## Product sales 2020

- **Distribution partner:** RuSACCOs and IWUA representatives chosen by community members
- **Formal agreements:** RuSACCOs & insurer; RuSACCOs & IWUA representatives
- **Trainings:** for RuSACCOs and IWUA representatives; Detailed checklists
- **Distribution process** w/ RuSACCOs, IWUA reps, and insurer
- **Intermediary between insurer and the community**



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## Lessons

Understand the risk

Price creatively & with farmers in mind

Invest time in partnerships

Trust-building with the community is key



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# Product and subsidy pilot testing in Northern Nigeria

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## Who is the end client?

Smallholder farmers belonging to Maize Association of Farmers, Kaduna Chapter

- Household size of 5 – 6 members; mud house
- 70% are males
- Informal worker; Earns less than USD 5 per day
- **Typical risks (not protected):** Crop losses due to Weather/Climate peril, Pest & Diseases, increases in input prices, illness, thieves, gov't officials
- **Worries:** Loss of income, impact of illness/accident on livelihood/farming activity, Savings or Credit or Input finance default risks due to poor harvest
- **Financial services:** No insurance but has a **bank account** (lives 15 miles away), **very little savings** kept at home, **transactions are in CASH**
- **Goals / dreams :** Increase yield, profit, access to finance and quality inputs, access to better farm risk management tools
- Reliant on Aggregators or Meso level distribution partners i.e. AFEX to assist them in facilitating financial



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## The problem and its effects

### Problems



### Effects

- Poor harvest stemming from both Weather and Non-weather-based risks could lead to erosion of farmer's savings / investments
- Crop Losses / Personal Accident / Illness or death could lead to loss of sales and income
- Risks could affect farmer's ability to repay Agric loans / credit default
- Becomes financial vulnerable or falls back into poverty trap
- Emergency sale of assets to meet pressing family financial challenges

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## Solution(s) developed

Product name	Crop Insurance
<b>Clients</b>	<ul style="list-style-type: none"> <li>▪ Maize Farmers Association of Nigeria, Rice Farmers Association of Nigeria, etc.</li> </ul>
<b>Risks covered</b>	<ul style="list-style-type: none"> <li>▪ <b>Weather risks</b> (i.e. drought, excess rainfall, flood), <b>Non-weather risks</b> (pest and diseases, fire outbreak, hail etc.), <b>Credit default risks</b>, and <b>Death or permanent disability risks to small-holder farmer groups</b></li> </ul>
<b>Non-insurance risk management</b>	<ul style="list-style-type: none"> <li>▪ Access to monitoring and evaluation tools, Trainings on GAP, Access to weather forecast information</li> </ul>
<b>Crops covered</b>	<ul style="list-style-type: none"> <li>▪ Maize, Rice, Ginger, Sorghum, etc.</li> </ul>
<b>Distribution channels</b>	<ul style="list-style-type: none"> <li>▪ NIRSAL, Central Bank of Nigeria, AFEX, Commercial Banks, MFIs</li> </ul>
<b>Premiums and sums insured</b>	<ul style="list-style-type: none"> <li>▪ Premium 3.5% - 5.5% of Sum Insured.</li> <li>▪ Sum Insured is typically calculated as value of loan amount per ha, cost of production per hectare or expected selling price per yield</li> </ul>

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## Subsidies<sup>1</sup>

Client – “Please tell us how much subsidy to apply”

### Key questions:

- Are subsidies really necessary?
- Who should get them?
- What should be the value of the subsidy?
- How should they be applied?
- Who will pay them?
- What is the exit plan?

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**AFEX** WAREHOUSE 1  
We want to offer you an option for this season...

**OPTION 1**

**4.5%**  
of loan

If bad weather (too little or too much rain) occurs...

Your insurance will decrease the loan amount you owe to AFEX

Pay 4.5% for the insurance product and you get the benefits presented in the Crop Insurance Full cover

**OPTION 2**

**4.5%**  
of loan amount

If too little rain occurs...

Your insurance will decrease the loan amount you owe to AFEX but will not cover you if too much rainfall occurs

The extra 2% of what you paid will be given to you as a voucher to purchase seeds from AFEX

Pay 4.5% but only 2.5% goes towards an insurance product of lesser value

**OPTION 3**

Do not pay for insurance. Your money will be refunded by 75%

Instead attend a workshop on risk management

If bad weather (too little or too much rain) occurs...

You will not be supported by insurance

Example: A farmer customer has a loan amount of N40,000 with AFEX. He pays N6,800 total. N1,000 is for insurance which does not include coverage from too much rain. The remaining N5,800 can be used to get more seeds from AFEX. If too little rainfall occurs, the farmer will have a portion of their AFEX loan forgiven

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## Subsidies<sup>2</sup>

**AFEX** WAREHOUSE 2  
We want to offer you an option for this season...

**OPTION 1**

**4.5%**  
of loan amount

If bad weather (too little or too much rain) occurs...

Your insurance will decrease the loan amount you owe to AFEX

Pay for your basic insurance product

**OPTION 2**

**4.5%**  
of loan amount

If bad weather (too little or too much rain) occurs...

Your insurance will increase your coverage up to 70% instead of 50%. This means more of your loan is being protected by the insurance!

Pay a little more for a better insurance product

Example: A farmer customer has a loan amount of N40,000 with AFEX. He pays N3,400 total to have the better insurance product. If there is too little rain during the early, he could get up to N26,000 decreased from the amount he has to pay back to AFEX for his loan. Whereas, the basic insurance would only allow him to have a maximum of N20,000 forgiven from his loan per risk.

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**AFEX** WAREHOUSE 3  
We want to offer you an option for this season...

**OPTION 1**

**3.9%**  
of loan amount  
**NOW**

If bad weather (too little or too much rain) occurs...

Your insurance will decrease the loan amount you owe to AFEX

Pay for your basic insurance product upfront at a discounted amount. Normally the product costs 4.5%

**OPTION 2**

**8.5%**  
of loan amount

If bad weather (too little or too much rain) occurs...

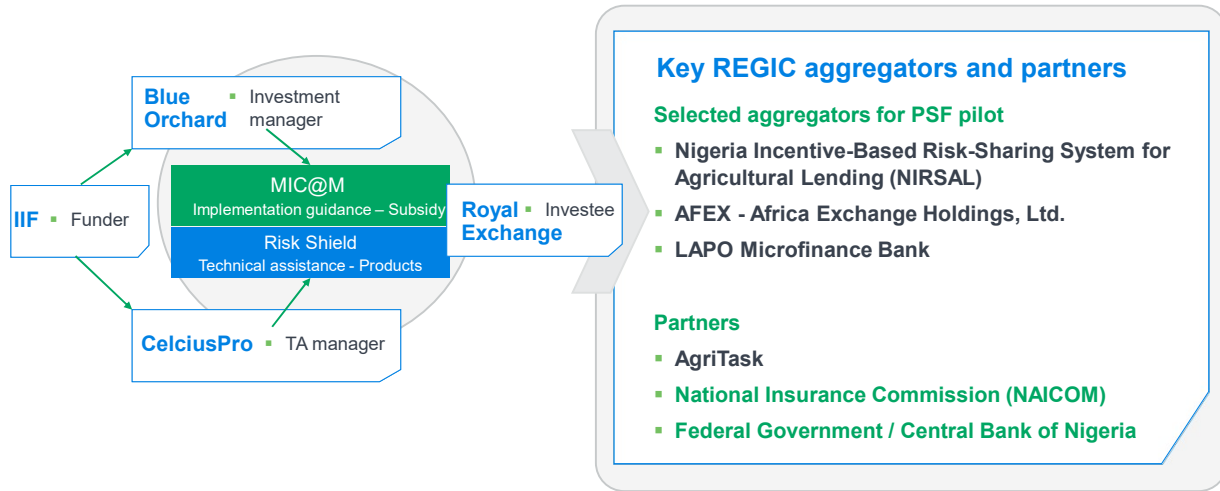
Your insurance will increase your coverage up to 70% instead of 50%. This means more of your loan is being protected by the insurance!

Pay a little more for a better insurance product

Example: A farmer customer has a loan amount of N40,000 with AFEX. He agrees to pay N3,400 total to have the better insurance product. If there is too little rain during the early, he could get up to N28,000 decreased from the amount he has to pay back to AFEX for his loan. Whereas, the basic insurance would only allow him to have a maximum of N20,000 forgiven from his loan per risk. Once the farmer has income from the harvest, AFEX will keep 8.5% of the loan amount to pay for the insurance.

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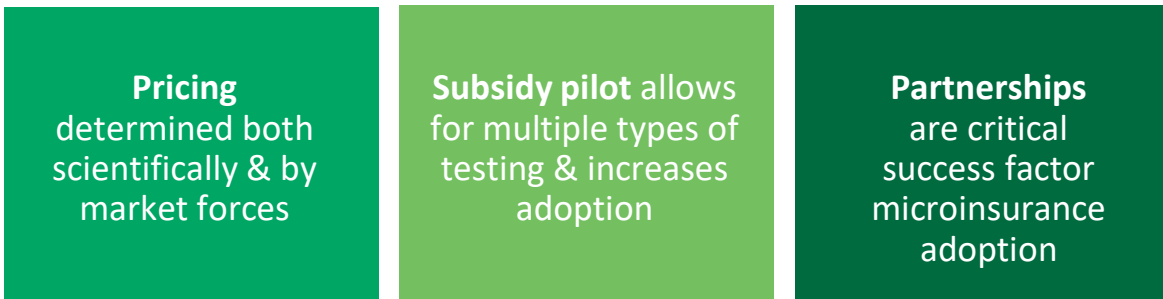
## Partnerships & relationship network



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## Lessons



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# Questions?

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