International Conference on Inclusive Insurance 2023 – Accra, Ghana

25 October 2023 – Day 3: Parallel session 8
14:00 – 15:30
Innovative solutions for bridging climate insurance gaps and addressing societal challenges: Case studies from Africa

Hosted by International Finance Corporation

SPEAKER
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SPEAKER
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SPEAKER
Isaac Magina
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SPEAKER
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Technical Focal Point, World Bank Livestock Productivity and Resilience Support Project (LPRES), Nigeria

FACILITATOR
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Financial Sector Specialist/Operations Officer, IFC, South Africa

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INNOVATIVE SOLUTIONS TO BRIDGE CLIMATE INSURANCE GAPS AND ADDRESS SOCIETAL CHALLENGES

ICII 2023: ACCRA
IFC is the private arm of the World Bank Group

IBRD
International Bank for Reconstruction and Development
- Loans for middle income countries

IDA
International Development Association
- Grants and concessional loans for low income countries

IFC
International Finance Corporation
- Solutions for private sector development: mainly investments and technical assistance (advisory services)

MIGA
Multilateral Investment Guarantee Agency
- Non-commercial risk guarantees to facilitate investment

ICSID
International Centre for Settlement of Investment Disputes
- Mediation and arbitration of investment disputes
In Africa, agricultural insurance is a crucial solution with various benefits, especially for smallholder farmers.

**DISASTER RESILIENCE**
- Facilitates faster recovery from losses caused by production shocks, including climate events.
- Provides security against unexpected weather-related shocks.
- Allows farmers to meet immediate needs to rebuild following a shock, e.g., buying inputs to replant, or buying food.

**FOOD SECURITY**
- Safeguards farmers’ investments and encourages them to invest more in production.
- Encourages adoption of improved agronomic practices.
- Can unlock access to high quality inputs which improve production and farmer profits.
- Higher quality inputs may also be more resilient to changing climatic conditions, leading to more resilient food systems.

**FINANCIAL INCLUSION**
- Directly contributes to financial inclusion as insurance is a financial service.
- Can improve financial institutions’ willingness to extend credit to smallholder farmers.
- Increased production and farmer income can encourage adoption of other financial products, e.g., savings accounts and investment products.

*Ultimately contributing to reduced dependence on food imports and economic growth*
Programmatic Approach to Inclusive Insurance Development

Creating Enabling Environment
- Inclusive insurance regulation
- Enabling environment development
- Market assessments and diagnostics

Creating Markets
- Providing technical advice/best practice guidance to (re)insurers entering the inclusive insurance space
- Capacity development support
- Knowledge sharing

Crystalizing Solutions
- Insurance product development and pilot testing
- Development of other risk transfer solutions (e.g., experience account)
- Facilitate linkages between insurers and farmer/SME aggregators for product bundling

Approx. 13 million insurance policies facilitated through:
- Global Index Insurance Facility (GIIF)
- Africa Inclusive Insurance Program (AIIP)
Coverage Gaps Remain

- Africa accounts for only about 1% of the global agri insurance premium volume of USD 46 billion*
- Over 60% of production is driven by smallholder farmers with limited coping mechanisms.
- Most production is rain fed and vulnerable to climatic shocks.

Lots of room for innovation.

Case Study 1: Product and process innovation driven by non-traditional insurance player.

Case Study 2: Can insurance provide solutions for other secondary climate shock effects, e.g., conflict?
JOHANNES BORCHERT
RISK AND RESILIENCE MANAGER, ONE ACRE FUND
Empowering farm families to fight poverty & climate change at scale
One Acre Fund’s Core Mission

Equip farmers with the tools they need to grow more food and earn more money

- Non-profit, serving low-income farmers
- 60% female, with <1.4 acres of land
- Small transaction sizes
- Nine countries, locally tailored approach
One Acre Fund’s Model: Holistic Market Bundle

**FINANCING**
- Credit, with flexible repayment
- Insurance

**DISTRIBUTION**
- On-time delivery
- Within walking distance

**TRAINING**
- Simple, participatory
- Delivered by farmers

**MARKET FACILITATION**
- Safe storage
- Fair market prices

**LIFE-IMPROVING TECHNOLOGIES**
- Seed
- PICS
- Safe storage
2030 Vision

By 2030, we aim to positively impact nearly one-third of our addressable market.

Today

- 4 million farmers served directly & through partnerships
- $300 million in new farm profits annually
- 150 million cumulative trees planted

By 2030

- 10 million farmers served overall
- $1 billion in new farm profits annually
- 1 billion cumulative trees planted

→ Big harvests are not enough. We will drive healthy families, rich soils, and climate resilience.
How We Measure Success
Impact (Farm Productivity) and Financial Efficiency

Farmer profits increase by ~40%

We are 73% self-sufficient

For every $1 USD donors contribute...
Financial Sustainability
Farmers contribute nearly $3 USD
We have six solution areas to help farmers & One Acre Fund both adapt to and mitigate against climate change

<table>
<thead>
<tr>
<th>SOLUTIONS</th>
<th>RATIONALE</th>
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<tr>
<td>1. Maximize plant health</td>
<td>Healthy plants are more likely to tolerate weather- and pest-related stress, providing a first line of defense against shocks.</td>
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<tr>
<td>2. Build soil fertility</td>
<td>Healthy soil retains more moisture during droughts and better manages excess moisture during heavy rainfall. It is also essential for plant health and effective input use.</td>
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<td>3. Diversify incomes</td>
<td>Diversified income sources help farmers weather shocks to any single source. Diversified crops also reinforce soil health, mitigate spread of pest &amp; disease, and help boost yields.</td>
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<td>4. Provide safety nets</td>
<td>The strategies above are the most effective ways for farmers to adapt, but major unmanageable shocks will persist, and for those we need a safety net.</td>
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<td>5. Reduce emissions</td>
<td>Some parts of our business model (i.e., local deliveries, fertilizer) are emission-intensive. We are seeking to reduce our footprint in ways that also deliver cost savings to farmers.</td>
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<td>6. Sequester more CO₂</td>
<td>We are investing in long-term resilience through reforestation and increasing soil carbon.</td>
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Insurance & Safety Nets
for Climate Resilience & Adaptation
In 2023, we insured 1.44 million farmers in 4 out of 9 countries.

Today, our coverage aims to give farmers the confidence to invest without the fear of indebtedness – a key barrier to investing in their farms.

In the future, we want micro- and ag insurance products to contribute significantly to climate resilience and adaptation.
What do we do today?

We bundle area yield and weather index products with input loans and are exploring offering them on a retail basis.

We are rolling out gender and youth-focused microinsurance products to millions of farming households.

We run a self-insurance scheme in Malawi and are growing actuarial and data science capacities in-house.
Farmer Spotlight: John Handson

Age: 46
1AF since: 2018 (5th year)
Land size: 1.5 acres in Southern Malawi
Crops: Maize, soya, pigeon peas, ground nuts, pumpkin leaves

- Drought in John’s area resulted in the loss of recently planted maize and legumes.
- As part of the yield insurance package, One Acre Fund re-delivered seeds to John and his family which he planted in time to salvage the season.
- He ended up with an average harvest and avoided a significant shock to his livelihood.
## Insurance Challenges: Overview

We are the largest, cheapest, and most successful agricultural insurance aggregator in East Africa. Though we have decreased premiums and made ag insurance more efficient for smallholders, we are unable to solve for the following barriers in the African agri-insurance market:

<table>
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<th>Value</th>
<th>Farmers cannot currently afford insurance products that confer resilience.</th>
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<td>Accuracy</td>
<td>Basis risk and late payouts make for a bad customer experience</td>
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<tr>
<td>Structure</td>
<td>The structure and incentives of the insurance market are not aligned with (small) farmers’ interests.</td>
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Challenge #1: Value

In high loss years, payouts don’t compare to damages.

For instance, if a Kenyan farmer experiences a 50% yield shortfall, our insurance payout only covers 35% of her up-front costs for that season – her family gets no relief for the remaining lost income.

As a result, insurance does not provide food security.

The graph above shows net farming income per acre, including current insurance payouts, across different yield shortfall scenarios in Malawi. Just a 25% yield shortfall would drop a Malawian family below the food security threshold, forcing meal-skipping and substitutions.
Challenge #2: Accuracy

Payouts are often divided by a large number of farmers in a given region, some of whom experienced more losses than others. This ‘waters down’ the payout amount for farmers who really need it.

Spatial Accuracy

Payouts come after the season or a long time after the actual shock happened. We are not very good at giving farmers help when they really need it and are in crisis.

Site-by-site yields in Malawi’s Chiradzulu District in 2021, a year with extreme weather events and widespread crop loss

Green = above average harvests; Blue = average; Red = catastrophic
Challenge #3: Structure

The African insurance sector is not working for poor smallholder farmers.

- Unlike in the U.S. or Europe, there are almost no available government subsidies in our operating countries.
- By being for-profit in nature and globally dispersed, most private-sector insurance schemes lack a focus on supporting farmer impact and resilience.
  - There is also clouded transparency and accountability around pricing decisions.
- Farmers themselves are perceived as risky bets. The perceived and actual increases in climate risk makes coverage expensive and inaccessible.
Our Journey

In 2020, we began seriously working on addressing these challenges.

● We started assessing premium rates, especially fees and loadings, with much more care and with the goal in mind to make sure farmers’ money is spent in the most efficient way possible.

● We found that both in the pricing, as well as in product design, there were huge gaps that prevented us from providing meaningful insurance products.

● This led us to seek a much broader coalition of reinsurers, insurers and brokers that understood the mission and goals of One Acre Fund.

● However, even after making significant changes and piloting many new approaches, we found that there was still a need for more transparency, flexibility and lenient pricing, that would scratch the limits of profitability.

● As far as we could tell, with very few exceptions, reinsurers and insurers were not in a place to address those needs and so we approached the International Finance Corporation (IFC) to find out what One Acre Fund could do to chart a path forward.
Our work with IFC

In 2021, we asked IFC to help us assess what One Acre Fund could do to address these challenges and to vastly improve insurance services to farmers.

**Value**
Milliman Microinsurance Centre conducting a 3-year research project on the relationship between subsidised insurance and climate resilience

**Accuracy**
We’ll be building product development and pricing capacities in-house with IFC’s support

**Structure**
Based on an analysis by Willis Towers Watson, we are establishing a sustainable and more efficient capital structure focused on impactful products for African farmers
ONE ACRE FUND

ONE ACRE RE — A Climate Resilience Insurance Fund for Africa’s Smallholders

Raphael Mwande and Fatima Bingesiti, One Acre Fund clients in Malawi
Our Solution: One Acre Re

One Acre Re will act as a semi-non-profit reinsurer that focuses on the needs of smallholder farmers; the majority of profits will be going back to farmers.

- One Acre Fund’s scale and diverse portfolio will allow us to establish this structure and to impact the lives of 1.4m farmer households from year one.
- We will work with a mission aligned reinsurer to establish this fund.
- We will then work with local insurance companies as fronting partners.
- The structure will include opportunities for private equity, investments as well as grant funding.

Benefits of this structure include faster payouts to farmers, increased coverage, more transparency and more flexibility. Through open books, we also hope to attract more donor premium subsidies to vastly improve coverage to build more resilient farmer households.

We will launch One Acre Re officially later this year and are excited and open to conversations with anyone who is interested or wants to get involved.
Our Vision for the Future

One Acre Fund strives to provide strong financial safety nets to **empower farmers and build climate resilience** via higher coverage and accurate products, paired with transparency and flexibility.

- **Value**: Define resilience thresholds and bring farmer coverage to that level
- **Accuracy**: Provide accurate, context-specific and fast products
- **Structure**: Establish sustainable and efficient capital structures through One Acre Re