## International Conference on Inclusive Insurance 2023 – Accra, Ghana

25 October 2023 – Day 3: 14:00 – 15:30 Parallel session 8

Innovative solutions for bridging climate insurance gaps and addressing societal challenges: Case studies from Africa

Hosted by International Finance Corporation

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www.inclusiveinsurance.org

#ICII2023



NATIONAL INSURANCE COMMISSION



BAG INSURANCE BROKERS ASSOCIATION OF GHAN/



 Munich Re Foundation From Knowledge to Action

# INNOVATIVE SOLUTIONS TO BRIDGE CLIMATE INSURANCE GAPS AND ADDRESS SOCIETAL CHALLENGES

**ICII 2023: ACCRA** 

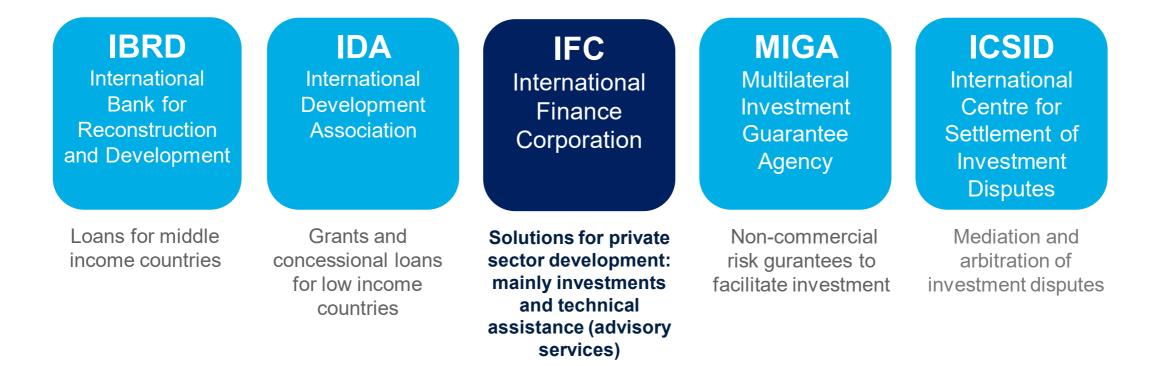


Creating Markets, Creating Opportunities



## IFC IS THE PRIVATE ARM OF THE WORLD BANK GROUP





## In Africa, agricultural insurance is a crucial solution with various benefits, especially for smallholder farmers

#### **DISASTER RESILIENCE**



#### **FOOD SECURITY**



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

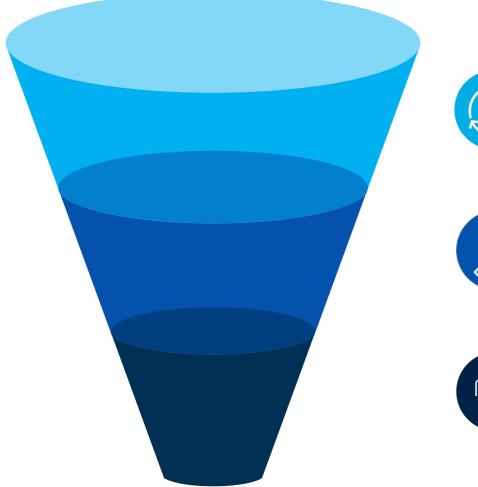


- Directly contributes to financial inclusion as insurance is a financial service.
- Can improve financial institutions' willingness to extend credit to smallholder farmers.
- Increased production and farmer income can encourage adoption of other financial products, e.g., savings accounts and investment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

Ultimately contributing to reduced dependence on food imports and economic growth



## **Programmatic Approach to Inclusive Insurance Development**





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## **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.

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

<u>Case Study 2:</u> Can insurance provide solutions for other secondary climate shock effects, e.g., conflict?





## **2023 INTERNATIONAL CONFERENCE FOR INCLUSIVE INSURANCE**



#### 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

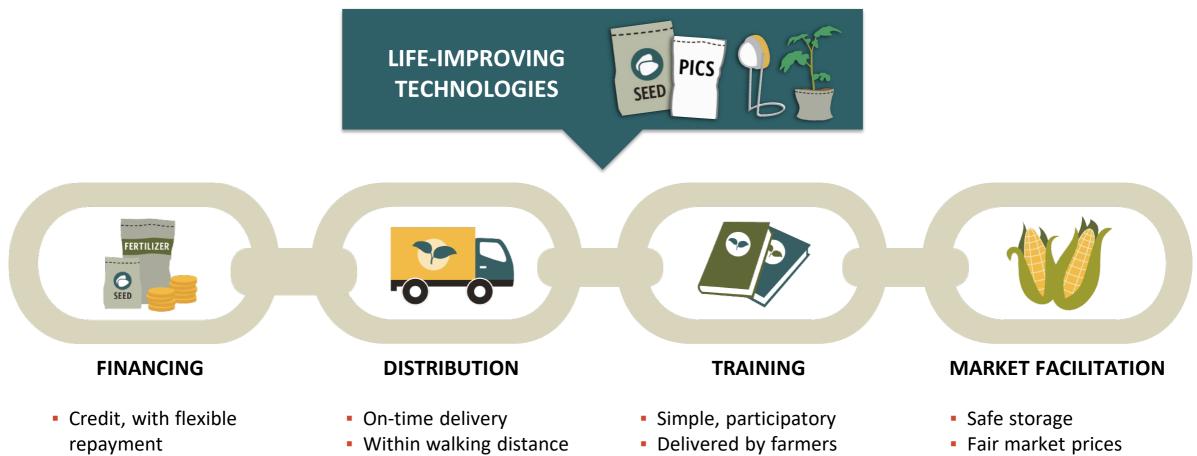


Small transaction sizes



Nine countries, locally tailored approach

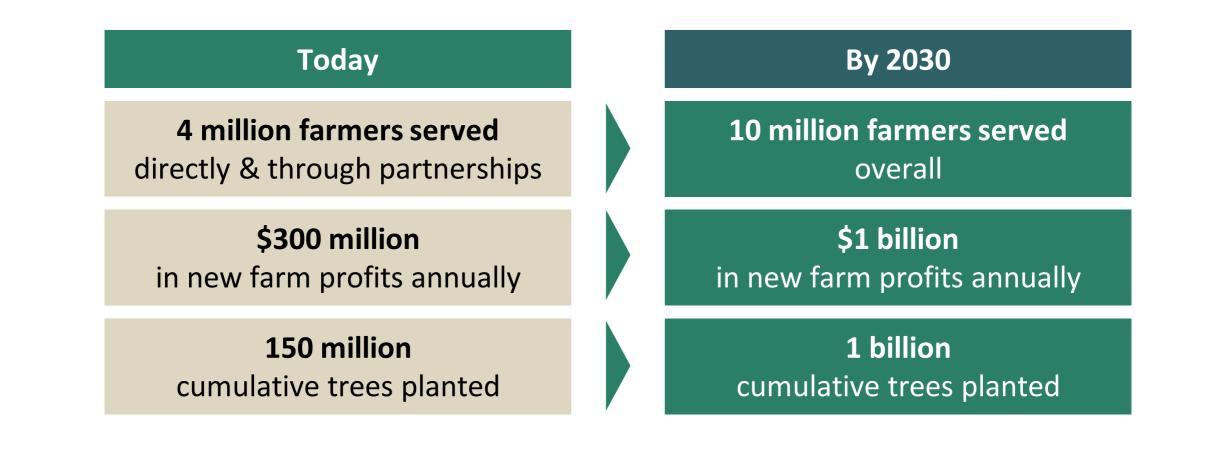
# **One Acre Fund's Model: Holistic Market Bundle**



Insurance

## 2030 Vision

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

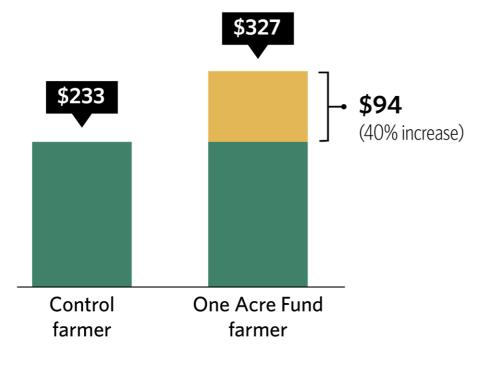


→Big harvests are not enough. We will drive healthy families, rich soils, and climate resilience.

## **How We Measure Success**

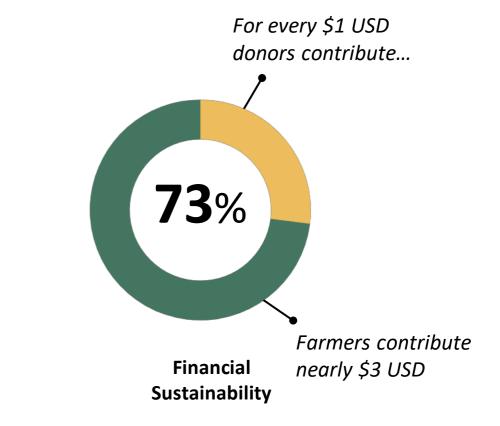
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## Impact (Farm Productivity) and Financial Efficiency



3-Year Average: 2019-2021

Farmer profits increase by ~40%



#### We are 73% self-sufficient

# We have six solution areas to help farmers & One Acre Fund both <u>adapt to</u> and <u>mitigate against</u> climate change

	Solutions	RATIONALE
Adaptation	1. Maximize plant health	Healthy plants are more likely to tolerate weather- and pest-related stress, providing a first line of defense against shocks.
	2. Build soil fertility	Healthy soil retains more moisture during droughts <i>and</i> better manages excess moisture during heavy rainfall. It is also essential for plant health and effective input use.
	3. Diversify incomes	Diversified income sources help farmers weather shocks to any single source. Diversified crops also reinforce soil health, mitigate spread of pest & disease, and help boost yields.
	4. Provide safety nets	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.
MITIGATION	5. Reduce emissions	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.
	6. Sequester more CO <sub>2</sub>	We are investing in long-term resilience through reforestation and increasing soil carbon.

## Insurance & Safety Nets for Climate Resilience & Adaptation



## We are one of East Africa's Largest Ag Insurance Facilitators



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.

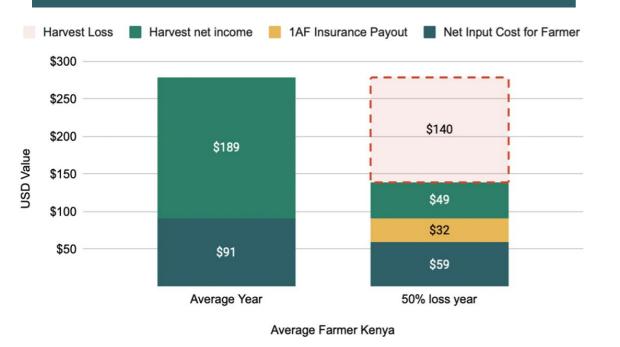
# **Insurance Challenges: Overview**

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:

Value	Farmers cannot currently afford insurance products that confer resilience.
Accuracy	Basis risk and late payouts make for a bad customer experience
Structure	The structure and incentives of the insurance market are not aligned with (small) farmers' interests.

# **Challenge #1: Value**

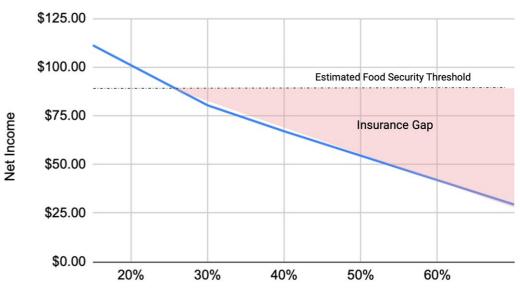
## In high loss years, payouts don't compare to damages.



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

## As a result, insurance does not provide food security.

Net Income at different Yield Shortfall Levels



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**



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

## **Spatial 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.

## **Temporal 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.

# **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.

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

# Accuracy

Value

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 RE — A Climate Resilience Insurance Fund for Africa's Smallholders

# **Our Solution: One Acre Re**

One Acre Re will act as a <u>semi-non-profit reinsurer</u> 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.





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