ACRE AFRICA utilizes technology to safeguard small-scale farmers from the challenges posed by climate change. Our mission involves maximizing the productivity of agriculture by alleviating the pressures and potential harm caused by climate fluctuations for farmers throughout the African continent.

ACRE Africa has offices present in Kenya, Rwanda, Tanzania Zambia and Nigeria, and has ongoing projects in Uganda, Ghana, Malawi, Zimbabwe, Ethiopia, Eritrea, Djibouti and Somalia.

ACRE Africa has developed insurance solutions tailored for our operational areas, resulting in more than 3 million farmers insuring their crops across various regions.
ACRE AFRICA - A Strong History and Strong Shareholders

ACRE is now a subsidiary of PTA Reinsurance Company (Zep Re). A COMESA institution and a major regional reinsurance company. ACRE also enjoys support from significant minority shareholders - Grameen Credit Agricole and Syngenta Foundation.

ACRE’s aim is to use innovation and technology to radically enhance the livelihoods of smallholder farmers in Africa.

Africa Climate Risk Enterprise Ltd (ACRE) was set up in 2014 by Syngenta Foundation.
ACRE Africa’s products and services

**Crop Insurance**
- Multiperil Crop Insurance
- Weather Index Insurance
- Area Yield Index Insurance
- Hybrid Crop Insurance
- Picture Based Crop Insurance/Monitoring
- Moisture Index Insurance
- Micro Insurance- Credit Life, Last Expense, PTD, Hospital Cash

**Advisory services**
- Agricultural Risk assessment and profiling
- Risk Management Training
- Climate change adaptation and mitigation strategies
- Micro Insurance product design
- Feasibility studies
- Farmers and Stakeholders training
- Livestock Insurance and Livestock Medical Cover

**Digital solutions**
- USSD platform with Location Based Services
- Farmer Register platform
- Season Monitoring – Crop Inspection platform
- Crop Cuts platform
- Insurance Contracts Administration platform
- Blockchain Technology
- Village Extension Service Models

**Commercially available**

**Innovations**

**Bundled**
Distribution of total written premium globally

Agricultural insurance worldwide

Geographic Distribution of Agricultural Insurance Premiums

- USA & Canada, US$ 13.6 billion (56%)
- Europe, US$ 4.0 billion (16%)
- Asia, US$ 5.6 billion (23%)
- Africa, US$ 180 million (0.7%)
- LAC, US$ 770 million (3%)
- Aus & NZ, US$ 160 million (0.7%)

Source: World Bank
Gap in smallholder insurance coverage across regions

Gaps in smallholder insurance coverage across regions, 2018

- Asia: 78% insured, 22% gap
- Sub-Saharan Africa: 97% insured, 3% gap
- Latin America: 67% insured, 33% gap

Source: ISF Advisors (2018), Protecting growing prosperity.
Limited Inclusion of Farmers in Financial Penetration

<table>
<thead>
<tr>
<th>Financial inclusion in Africa = Accessing Farmers</th>
</tr>
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<tbody>
<tr>
<td><strong>80%</strong></td>
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<tr>
<td><strong>53%</strong></td>
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<td><strong>3%</strong></td>
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<td><strong>33%</strong></td>
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Agribusiness value chain and risks

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Governments</td>
<td>Budget Risk/Social Stability</td>
</tr>
<tr>
<td>Financial Institutions</td>
<td>Credit Risk</td>
</tr>
<tr>
<td>Input Supplier</td>
<td>Sales volume / Product enhancement</td>
</tr>
<tr>
<td>Distributor</td>
<td>Sales volume / Product enhancement</td>
</tr>
<tr>
<td>Farmer</td>
<td>Production Risk / Revenue risk</td>
</tr>
<tr>
<td>Trader</td>
<td>Production Risk</td>
</tr>
<tr>
<td>Processor</td>
<td>Lack of Raw Material / Business Interruption</td>
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</table>
Agricultural producers face a series of risks

a) Climate Change
b) Increasing floods, droughts; new diseases
c) Declining natural resources
d) Price volatility

Majority smallholder farmers’ challenges

a) Vulnerability; low resilience
b) Largely rain-fed agric
c) Low access to credit
Standard Response to Agriculture Disaster - African Context

1) Food aid/Cash Aid to affected population
2) Budget relocations
3) Post-drought livestock restocking

Key Problems:
- Slow
- Expensive
- Disrupted budget; national plans
- Targeting challenges
- Food aid can reinforce dependency
Agric Insurance as an alternative

- Reduce the impact of risks in Agric
- Increase farmers’ access to credit, and inputs
- Improve agricultural productivity, transition from subsistence to commercial farming
- Provide social protection to the poor
- Build resilience of vulnerable communities
- Reduce Food Aid and Ad-hoc expenditures during hazard periods

Crop Insurance protects farmers and their crops from suffering major financial losses and setbacks in the face of increment weather conditions or other catastrophic incidences.
A Brief Overview of the importance of Agricultural Insurance

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk Mitigation</td>
<td>Agriculture is susceptible to various risks like weather events, pests, and market fluctuations. Insurance provides a safety net against these uncertainties.</td>
</tr>
<tr>
<td>Income Stabilization</td>
<td>Insurance payouts compensate for crop losses, stabilizing farmers' income and preventing financial crises during difficult seasons.</td>
</tr>
<tr>
<td>Food Security</td>
<td>By safeguarding farmers' livelihoods, agriculture insurance contributes to overall food security by ensuring a stable supply of crops.</td>
</tr>
<tr>
<td>Climate Resilience</td>
<td>In the face of climate change, insurance encourages adoption of climate-resilient practices, promoting long-term sustainability.</td>
</tr>
</tbody>
</table>
Importance of Agricultural Insurance cont.....

**Economic Growth**: A robust agriculture sector drives economic growth by boosting production, income generation, and employment opportunities.

**Disaster Recovery**: In the aftermath of disasters, insurance aids in the recovery process, helping communities rebuild faster and more effectively.

**Inclusive Development**: Agriculture insurance extends financial protection to smallholder farmers, fostering inclusivity and reducing inequality in rural areas.

**Debt Management**: Insurance assists farmers in repaying loans even in case of crop failures, reducing the burden of debt and financial strain.
Link between Scale & Sustainability in Agriculture Insurance

The link between scale and sustainability in agriculture insurance is crucial for the effectiveness and longevity of insurance programs aimed at protecting farmers against various risks. Here's how scale and sustainability are interconnected:

Scale:

**Wider Coverage**: As the scale of agriculture insurance expands, it encompasses a larger number of farmers and agricultural areas, providing a broader safety net against risks such as crop failures, extreme weather events, and market fluctuations.

**Diversification**: With a larger pool of insured farmers and regions, the risk portfolio diversifies, reducing the impact of localized losses and creating a more balanced risk distribution.

**Economies of Scale**: Operating on a larger scale allows insurers to achieve economies of scale in administrative processes, data management, and underwriting, which can lead to reduced operational costs per insured unit.
**Financial Viability:** Sustainability refers to the ability of the insurance program to continue operating over the long term without relying solely on external subsidies. A larger scale of operations can contribute to financial sustainability by generating more premium revenue.

**Reduced Dependency:** A well-scaled insurance program is less reliant on intermittent government subsidies or external funding sources. This independence enhances the program's stability and reduces vulnerability to funding fluctuations.

**Risk Spreading:** With a broader geographic coverage and a larger number of insured farmers, the impact of individual losses is spread out. This mitigates the potential for large payout shocks and contributes to the program's financial stability.

**Innovation and Improvement:** A sustainable insurance program can invest in improving its offerings, expanding its services, and adopting innovative technologies to better serve farmers' evolving needs.
Interplay

Feedback Loop: Scale and sustainability reinforce each other in a positive feedback loop. As the program scales up, its financial sustainability improves, enabling it to offer better terms and services to farmers. This, in turn, attracts more farmers to join the program, further enhancing its scale.

Resilience: A larger and sustainable insurance program is better equipped to weather external challenges, such as regulatory changes, economic fluctuations, or shifts in weather patterns. This resilience contributes to its continued effectiveness.

In essence, achieving a substantial scale in agriculture insurance operations is a key driver of sustainability. A well-scaled and sustainable insurance program ensures that more farmers have access to reliable risk mitigation tools, while also establishing a robust foundation for long-term viability and impact within the agricultural sector.
Importance of Scale and Sustainability

The Need for Broadening Access to Agriculture Insurance

Broadening access to agriculture insurance is essential to ensure that a wider spectrum of farmers, including smallholders, can safeguard their livelihoods against unpredictable risks such as climate events and market volatility.

By extending coverage to underserved regions and marginalized communities, access to insurance enhances resilience, prevents financial shocks, and promotes inclusive economic growth in the agricultural sector.

This expansion is integral to fostering sustainable development and food security in vulnerable agricultural systems.
Constraints to Scale and Sustainability

Premium Financing

Constraints

- Affordability Challenges for Smallholders
- Reliance on Government Subsidies
- Low Awareness and Understanding

Potential Solutions

- Microfinance Partnerships for Premium Integration
- Leveraging Index-Based Insurance Models
- Gradual Reduction of Premium Subsidies
- Educational Initiatives
- Flexible payment schedules
- Digital payment platforms
Regulatory Environment Support

1. Reduce market entry barriers
   - Reconsider licensing requirements, particularly in light of innovative uses of technology and partnerships for product distribution
   - Employ risk-based capital requirements
   - Define microinsurance in a way that minimizes incentives for regulatory arbitrage
   - Recognize the need for higher returns on lower-priced and often riskier products

2. Encourage market demand
   - Provide and support comprehensive risk management educational initiatives, including insurance literacy
   - Encourage and make available effective risk mitigation strategies
   - Enhance underlying services, such as health care
   - Enforce regulations and demonstrate intolerance for corruption and fraud

3. Encourage market efficiency
   - Offer data and management support
   - Provide training to agents, actuaries, underwriters, and insurance managers
   - Allow and encourage involvement of international reinsurers and alternative risk transfer mechanisms
Fundamental concepts in developing successful and sustainable agricultural insurance program

1. **Think long-term**: Insurance takes years to develop correctly.
2. **Understand the risk**: Creating a risk profile. This requires investment in both time and money.
3. **Insurance Should Complement other Risk Mitigation Actions**: Transferring all or a portion of the risk (i.e. insurance) is often most effective when other risk mitigation steps are also taken - often times prior to establishing an insurance program.
4. **Without demand there is no program**: Demand is generated by those who would purchase the insurance protection. Insurance programs must be demand centric rather than supply driven.
5. **Multiple Ministries should be continually engaged in a PPP model**: Without multi-ministries cooperation it is highly unlikely that a sustainable insurance program can exist.
Fundamental concepts continued cont...

6. **Laws, Regulations and Policies Transcend Politics:** insurance is a long-term proposition. Laws, regulations and policies should follow suit. Sound laws, regulations and policies promote stability, transparency and accountability.

7. **Include Reinsurers Early:** Reinsurers constitute an essential and significant financial and technical resource of any insurance program. Reinsurers are experts in developing risk profiles and generally analyzing and understanding risk.

8. **No Single Insurance Product is a Panacea:** no product will address all risks within a country’s risk profile. Usually a series of insurance products are needed to adequately address the range of agricultural characteristics in each country.

9. **The Devil is in the Details:** A crop insurance program should be simple to apply and easy to understand. This is easier said than done.
Role of PPP in Agriculture Insurance

- Industry Regulators
- Ministries of Agriculture

- Engagement with regulators and insurance associations
- Market level capacity building support to promote competitiveness.

Public Players

Private Players

Market Level

Firm Level

- Insurance and reinsurance companies
- Banks and MFIs
- Agribusinesses
- Other aggregators

Interacting directly with insurers, banks/MFIs, agribusinesses.
Through partnerships, ACRE Africa leverages cutting-edge tools such as remote sensing, data analytics, and blockchain to develop more accurate risk assessment models, streamline claims processing, and deliver timely, data-driven insights that empower farmers to make informed decisions and build climate-resilient livelihoods.
**Digital Innovation**

**Strong digital infrastructure is needed.**

- Digital and remote processing of the entire insurance process is crucial to making sure that **premiums are affordable** and large numbers of policies can be managed.
- ACRE has developed **best in class** digital infrastructure.

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**Onboarding of Farmer**

- **Digibima**
  - Digibima allows ACRE to register farmers and provides a platform for its insurance products to be accessed by stakeholders – insurers, reinsurers etc.

**Distribution and Bundling**

- **BimaPima**
  - Bima Pima collaborates with farm input suppliers, credit financiers and other insurance distribution partners. The tool can provide SMS based advisories to the farmers. Platform will also be used for CCE data collection exercise.

**Monitoring and Crop Assessment**

- **SeeitGrow**
  - SeeitGrow is the ACRE picture based insurance system. It allows farmers and VCs to upload pictures for review allowing ACRE to monitor and assess the performance of crops.

**Claims Processing**

- **Bima-Bolt**
  - Bima-Bolt monitors weather data in real-time and using blockchain technology performs claim assessments and produces pay-out schedules.
VCs are in a unique position to act as a conduit for service providers.

1. **Banking**
   - Opening bank accounts for smallholder farmers and linking them to credit.

2. **Insurance**
   - Selling more products – life, medical.
   - Training and licensing VCs as regulated agents through ACRE.

3. **Advisories**
   - Training in basic agronomy and access to ACRE tools to provide advisories to farmers.

4. **Data**
   - Providing on the ground data for ACRE to improve products and enhance services of other providers.

5. **Carbon Credits**
   - Training farmers to implement carbon capture practice and providing data for verification to allow carbon credits to flow to smallholder farmers.

6. **Inputs**
   - Distributing drought resistant inputs to farmers.

Carbon Credits and Inputs are provided by the VCs as a conduit for service providers.
Merci Beaucoup
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