



Scale and Sustainability of Agriculture Insurance - ACRE AFRICA Perspective

July 2023 – Dakar Senegal

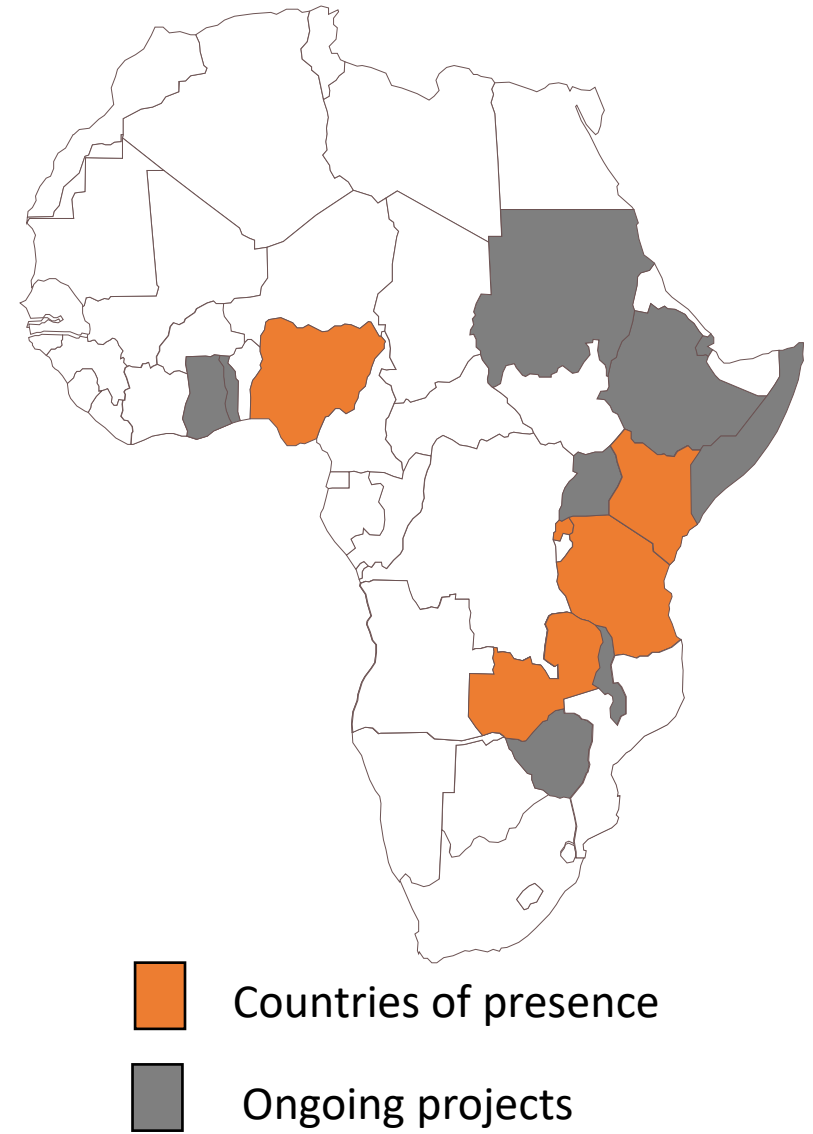
Presented by: Farid K Wangara

Chief Operations Officer & Principal Officer, ACRE AFRICA

September 2023

Introduction to ACRE AFRICA

- 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.



Introduction Continued...

ACRE AFRICA - A Strong History and Strong Shareholders



The logo for ACRE AFRICA, featuring the word 'acre' in a bold, lowercase font with the 'a' in orange and 'cre' in dark blue, and the word 'AFRICA' in a smaller, all-caps, dark blue font below it.

Africa Climate Risk Enterprise Ltd (ACRE) was set up in 2014 by Syngenta Foundation.



ACRE is now a **subsidiary of PTA Reinsurance Company (Zep Re)**. A COMESA institution and a major regional reinsurance company.

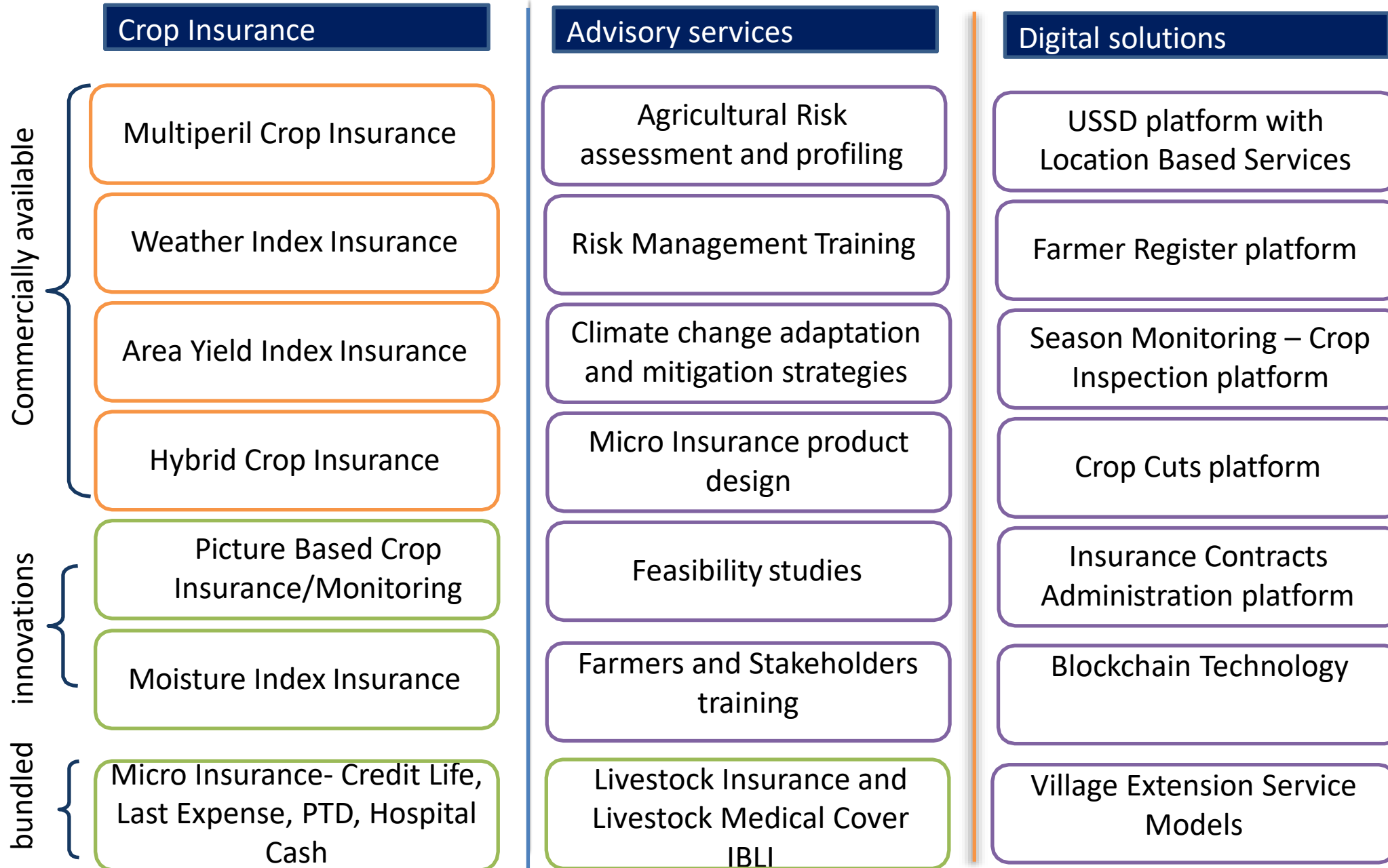


ACRE also enjoys support from significant minority shareholders - **Grameen Credit Agricole and Syngenta Foundation.**



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

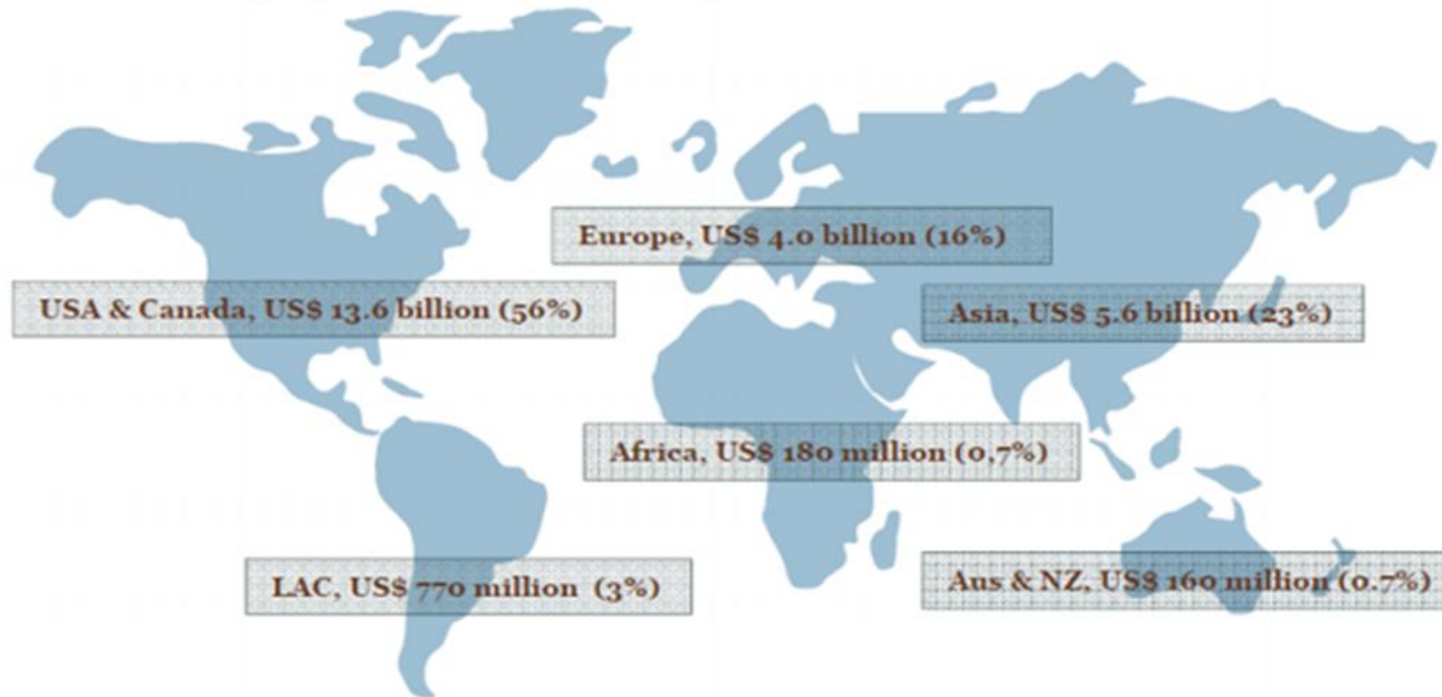
ACRE Africa's products and services



Distribution of total written premium globally

Agricultural insurance worldwide

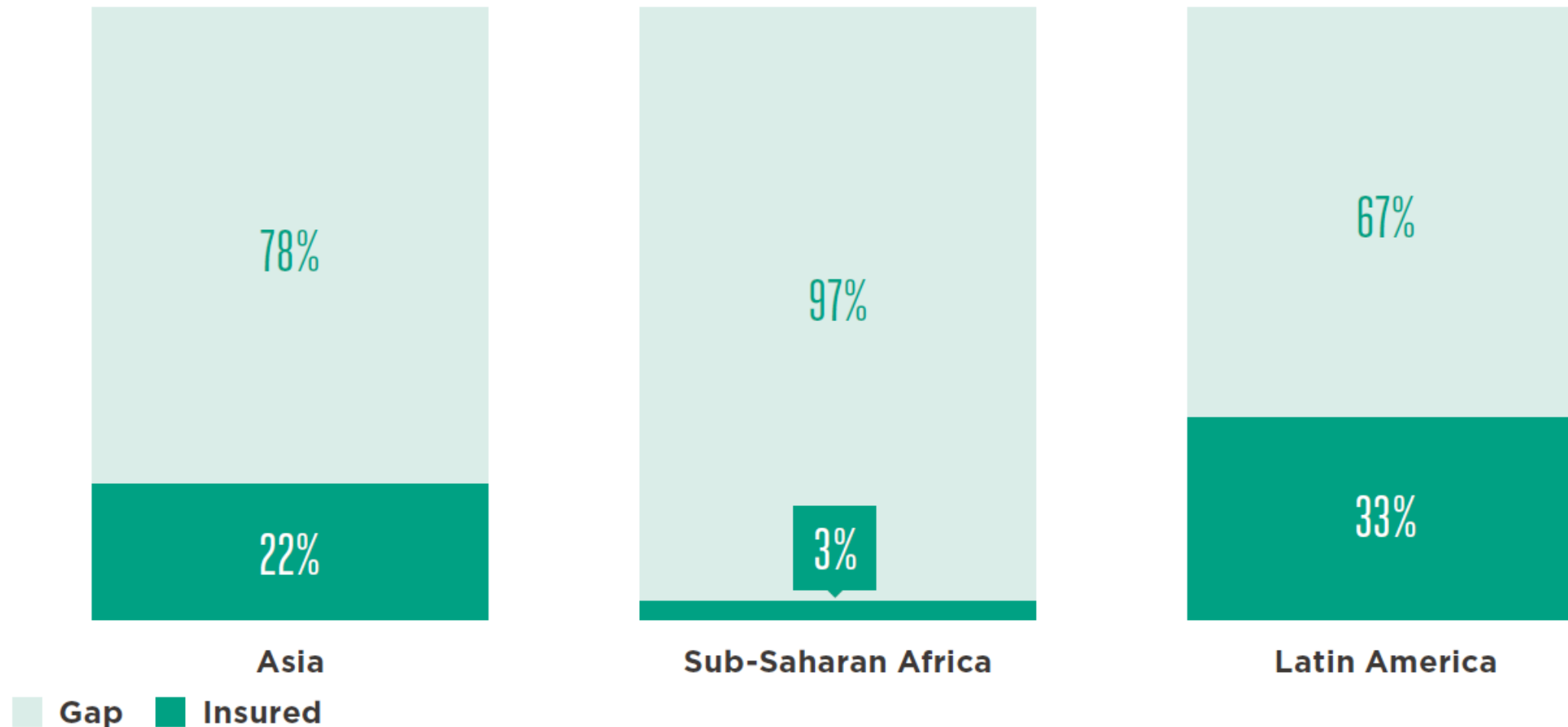
Geographic Distribution of Agricultural Insurance Premiums



Source: World Bank

Gap in smallholder insurance coverage across regions

Gaps in smallholder insurance coverage across regions, 2018



Source: ISF Advisors (2018), *Protecting growing prosperity*.

Limited Inclusion of Farmers in Financial Penetration

Financial inclusion in Africa = Accessing Farmers

80%

Within Africa **80% of food production is from smallholder farmers and 65% of the population relies on un-irrigated subsistence farming** making the continent uniquely vulnerable to weather volatility and climate change.

53%

In SSA **53% of employment is in the agri-sector** (Kenya and Zambia over 50%, Tanzania and Rwanda over 60%).

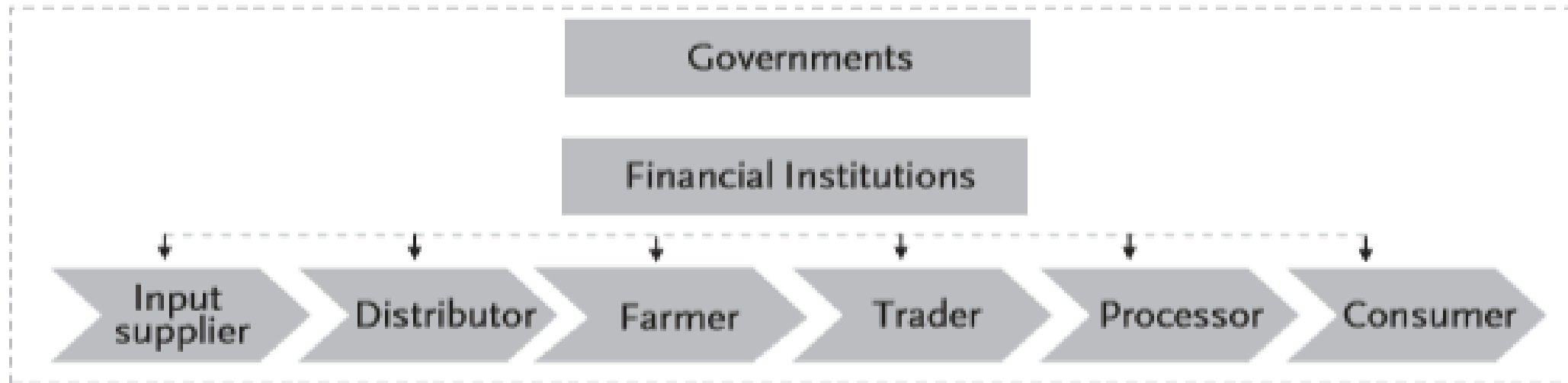
3%

Only **3% of smallholder farmers in Africa have access to agricultural insurance** coverage compared to **20% in the rest of the developing world.**

33%

Private sector lending to the agricultural sector made up just **3-4% of loans and yet the sector generally makes up 30-40% of GDP** across eastern and southern Africa.

Agribusiness value chain and risks



Stakeholder	Risk
Governments	→ Budget Risk/Social Stability
Financial Institutions	→ Credit Risk
Input Supplier	→ Sales volume / Product enhancement
Distributor	→ Sales volume / Product enhancement
Farmer	→ Production Risk / Revenue risk
Trader	→ Production Risk
Processor	→ Lack of Raw Material / Business Interruption

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

Risk Mitigation: Agriculture is susceptible to various risks like weather events, pests, and market fluctuations. Insurance provides a safety net against these uncertainties.

Income Stabilization: Insurance payouts compensate for crop losses, stabilizing farmers' income and preventing financial crises during difficult seasons.

Food Security: By safeguarding farmers' livelihoods, agriculture insurance contributes to overall food security by ensuring a stable supply of crops.

Climate Resilience: In the face of climate change, insurance encourages adoption of climate-resilient practices, promoting long-term sustainability.

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.

Link between Scale & Sustainability in Agriculture Insurance cont.....

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.

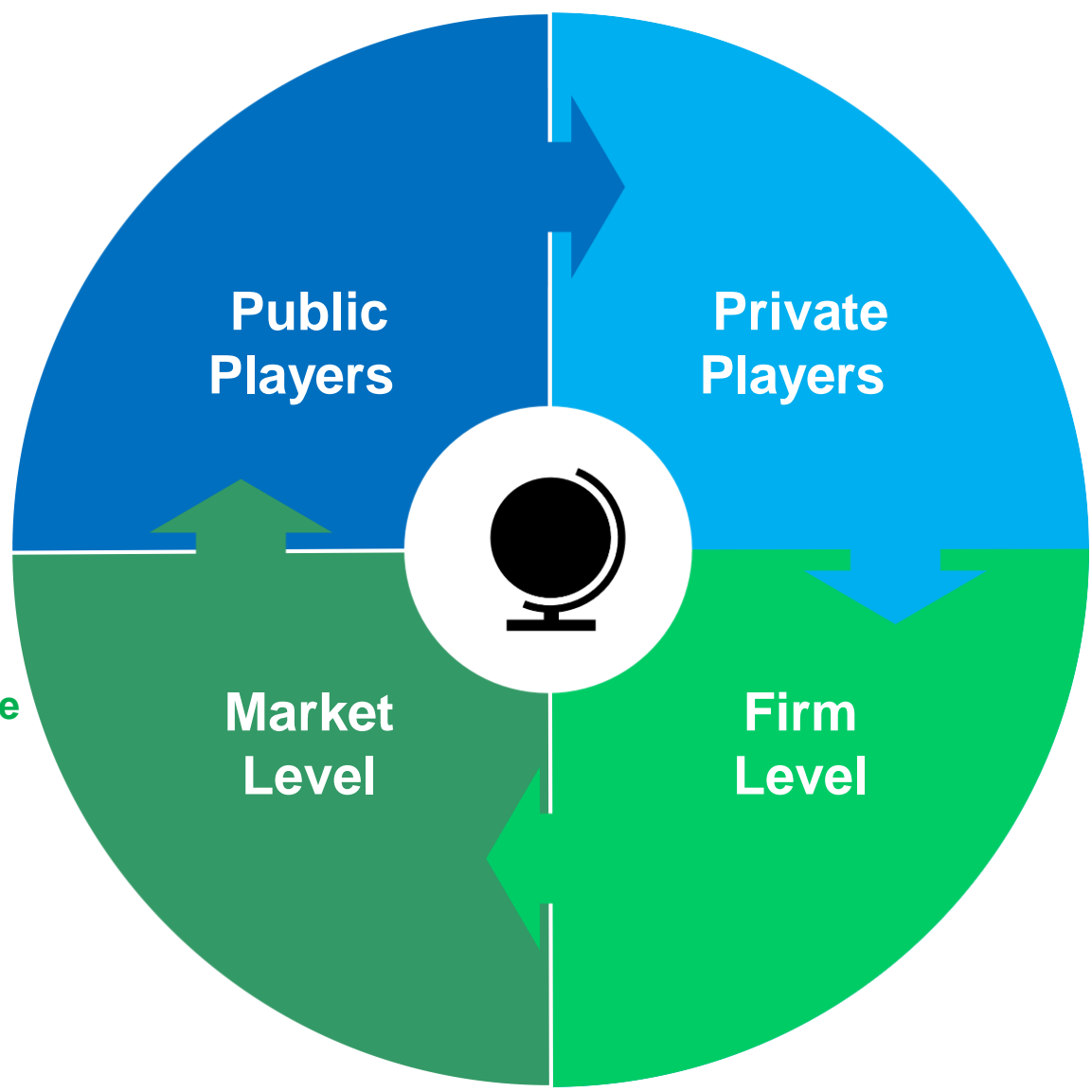
7. Include Reinsurers Early: Reinsurers constitute an essential and significant financial and technical resource of any insurance program. Reinsurers are experts in developing risk profiles and generally analyzing and understanding risk.

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



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

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

- Interacting **directly with insurers, banks/MFIs, agribusinesses.**

Role of Technology and Village Champion Model



Digital Platforms:

Enabling Seamless Policy Management
Broadening Accessibility and Outreach



Data-Driven Insights for Better Risk Assessment



Blockchain and Smart Contracts in Agriculture Insurance:

Ensuring Transparency and Trust
Automating Claims Processing and Verification
Mitigating Fraud and Improving Efficiency



Remote Sensing and AI:

Revolutionizing Risk Assessment and Monitoring,



Timely and Precise Payouts for Farmers

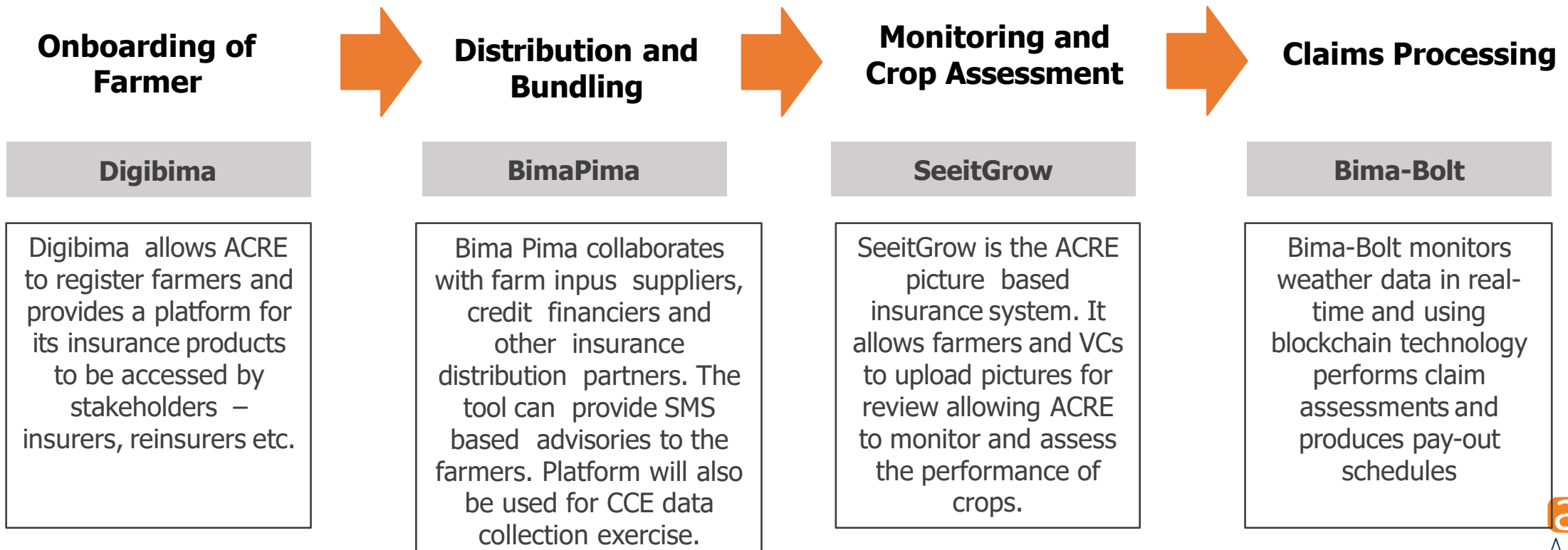
Enabling Precision Agriculture Practices

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

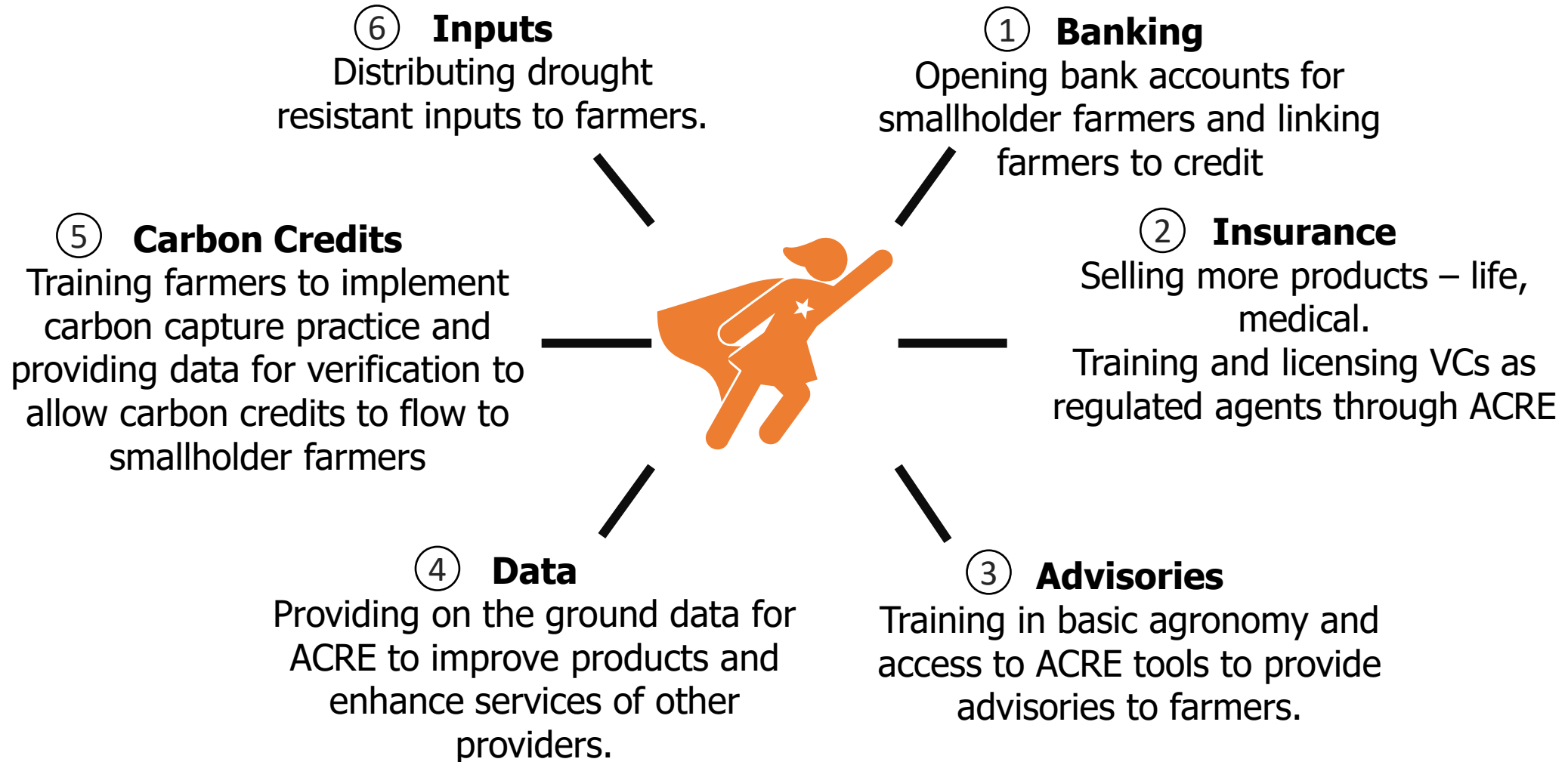
Strong digital infrastructure is needed.

- 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.



VC as Rural Micro-entrepreneur!

VCs are in a unique position to act as a conduit for service providers





Merci Beaucoup
fkeya@acreafrica.com