Agricultural Index Insurance
Kenyan Experience: Background
Inclusive Insurance Regional Training Program
Dar es Salaam
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Role and potential

• Agricultural insurance can ...
• help smallholder farmers access finance and increase productivity
• enhance food security and provide finance for government for post-disaster relief
• Innovations around product design and technology is opening new possibilities ...
• index-insurance manages moral hazard and allows for simpler claims assessment
• hybrid products - index for weather and indemnity for pests and diseases
• advances in technology support more accurate indices – automated weather stations
• Agricultural insurance is gaining interest ...
• government-led programmes and smaller pilots
• role in national disaster risk management strategies
Question for Discussion

What are the challenges to providing agricultural or agricultural index insurance in your country?

Challenges and limitations

- **Product design**: availability of reliable data and robustness of index, limitations of technology and managing basis risk
- **Costs**: high loss ratios and other expenses (e.g. maintenance of rain gauges)
- **Operations and partners**: managing a wide network of partners: insurers, reinsurers, aggregators (e.g. farmer associations for enrolment, premium collection, distribution of payouts), support services: data, actuarial, loss assessment, payment systems, software development, donors, government and supervisors
- **Product understanding**: complex product, appropriate point of sale disclosures, lack of awareness that are insured if fully subsidised
- **Demand**: weak demand, challenges with affordability
- **Coordination of stakeholders**: different interests (e.g. Ministry of Agriculture, disaster management agencies etc)
- **Regulatory issues**: uncertainty of approach, lack of expertise

*Achieving scale and sustainability and ensuring that customers are treated fairly and get value from products is a key concern*
Implementation strategies

- **Product design**: focus on farmers’ needs, keep products simple, use quality data (don’t lose sight of the customer in technical details)
- **Cost**: leverage technology (mobile technology)
- **Operations and partners**: focus on farmers’ needs (fast claim payouts through automated weather stations linked to an online database, SANASA Insurance Sri Lanka), train partners (train-the-trainers scheme, Thailand)
- **Demand**: product bundling (personal accident, hospitalisation SANASA Insurance, Sri Lanka), government subsidies and other support for national programmes (Kenya, Uganda), strategies to develop farmer understanding of insurance
- **Coordination of stakeholders**: multi-stakeholder steering committee (Kenya, Uganda Agriculture Insurance Scheme)
- **Regulatory matters**: clear framework, product approval, monitoring of index insurance projects, develop expertise (Philippines, Kenya)
- **Integrate** with other risk management measures (land development, water conservation, crop and livelihood diversification and credit support, DHAN Foundation, India)

Question for Discussion

Are there any examples of implementation strategies to overcome the challenges of agricultural insurance in your country?
Looking forward

- Aim to have small-scale farmers voluntarily buying competitive agricultural insurance products in an informed manner
- Various initiatives have made some headway but there is still a long way to go
- Aim to see pilot schemes transit to full commercialisation and achieve scale

Background to IBI in Kenya

- Pilot Index-based Insurance (IBI) products have been sold in Kenya since 2010
- About 7 leading companies are involved in the pilot phase of IBI products
- IRA Kenya is very supportive of the development of pilot IBI products in the Kenyan market
- Draft Index Insurance regulations exist which lays out a legal framework for the design, marketing, claims handling and consumer protection requirements for these products
1. Kilimo Salama - Index Based Agriculture Insurance

- Acre Africa registered as an Insurance Surveyor in Kenya
- Support from Syngenta foundation & GIIF
- Project started in 2009 - to protect small-scale farmers against unpredictable weather
- Insurer - UAP - a large insurance company based in Kenya,
- Crops insured include maize, sorghum, coffee, sunflower, wheat, and potato,
- Coverage against drought, excess rain and storms
- Kilimo Salama currently insures over 70,000 farmers
- Also offers protection for seeds, chemicals and harvest outputs
- Premium income – over USD 2,100,000, Average Loss ratio 61%
1. Kilimo Salama Index Based Agriculture Insurance

- Index-based weather insurance product that allows farmers to insure inputs purchased at participating agricultural dealers.
- Farmers pay a premium equal to approximately 5 percent of the USD 100 worth of inputs required to plant one acre of maize, and the input manufacturer matches with another 5 percent.
- Farmers can register through microfinance institutions, cooperatives, or agricultural dealers, all of whom use a mobile phone application to enter the farmer’s details into the system.
- The farmer then receives a confirmation SMS listing registration details and a policy number. Rain levels are monitored using satellite data and automated weather stations;
- In the event of excess rain or drought, funds are automatically paid into the farmer’s M-PESA account.

Index Based Livestock Insurance (IBLI) (2010-2013, Marsabit)

**First Contract – Asset Replacement**

- Livestock mortality data modelled from NDVI used
- Pays out when forage scarcity is predicted to cause livestock deaths in an area
- Rolled out in August 2013 – APA Insurance in Isiolo and Takaful Insurance of Africa in Wajir county
- Challenges: limited mortality data for scaling up and general data accuracy
- Complexity of design, data scarcity and precision concerns resulted in a move to NDVI only contracts

**New Contract – Asset Replacement**

- Pay out at the beginning of the dry season rather than the end
- Insured Unit- Cost to keep livestock alive during drought
- Greater attention to the science of remote sensing
- Rolled out in January 2015 – APA Insurance (Marsabit & Isiolo), Takaful Insurance of Africa (Wajir, Isiolo, Mandera, Garissa) counties
2. Kenya Livestock Insurance Programme – KLIP (Phase 1)

• Launched in Turkana and Wajir in October 2015 - with APA Insurance as the underwriter

• 5,012 pastoralists pre-selected by SDL as beneficiaries (2,510 in Wajir and 2,502 in Turkana). The contract should trigger twice a year i.e.

• For the Short Rains Short Dry (SRSD) season of October – February – payouts should be made by mid February of every year

• For the Long Rains Long Dry season (LRLD) of March –September – Payouts should be made by mid August of every year in case there is a trigger

2. Kenya Livestock Insurance Programme – KLIP (Phase 1)

• For the SRSD period, no location triggered a payout

• For the LRLD period, final index readings triggered in two areas (DIFF & BUTE units)

• 275 beneficiaries in the two UAI were affected

• A total of USD 35,266 paid to the beneficiaries

• The next phase to cover additional 4 counties (Marsabit, Mandera, Tana River and Isiolo)
2. Kenya Livestock Insurance Programme – KLIP (Phase 2)

- The 2nd phase covered additional 4 counties (Marsabit, Mandera, Tana River and Isiolo) bringing to a total of 6 covered
- Rolled out in October 2016 (to cover SRSD season)
- Final Index readings were consistent with the situation on the ground
- Kenya experienced one of the worst droughts in 15 years in these areas
- All the 6 Counties – covering 70 UAIs were affected
- Out of the 70 UAIs, 62 UAI had trigger for payouts
- Estimated total payout USD 2.15 million to 12,000 farmers (Beneficiaries in all the counties) made in February 2017

Summary of KLIP:
- Total premium paid on the programme since inception – USD 2.15 million
- Total payouts to date – USD 5.36 million
- Loss ratio - 250%

Agriculture Index Insurance

- Insurance programme launched in March 2016
- Target – Farmers with < 5 acres parcels of land – maize and wheat crop
- Government subsidises 50% of the premiums
- Insurance policy roll out (retail) – Embu, Bungoma and Nakuru counties
- Crop cutting Experiments to determine yield levels revealed that no payout was triggered in any of the counties
- Compensation to the Insured for Shortfall below the Guaranteed Yield in the UAI
- Guaranteed Yield – 80% of Expected Yield per unit Area of Insurance
- Programme expanded to 10 Counties from March 2017

Question for Discussion

Describe the key features and partnerships of one example of an agricultural insurance or agricultural index insurance in your country?
Thank you

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