

Introducing Agricultural Insurance to Smallholder Farmers by ACRE Africa in Tanzania

1. DEVELOPMENT RELEVANCE

Economic and poverty context²

In 2017 Tanzania had an estimated population of 57 million³ out of which 67%⁴ engaged in agriculture as their main economic activity and agriculture contributing to 30% of the GDP⁵.

The main barriers identified in the growth of agriculture have been access to finance and markets and production risks, mainly weather-related. The aim of the insurance product up-scaling initiative that ACRE Africa / ACRE Tanzania (former Kilimo Salama Program) initiated was to provide access to weather risk-mitigation tools for smallholder farmers in Tanzania to better manage production risks, positively impacting investment, productivity and ultimately a reduction in poverty among farming communities.

Financial sector context

The importance of inclusive finance has been demonstrated through various initiatives championed by the Tanzanian government. One such initiative is the National Finance Inclusion Framework launched in 2013 to expand financial access in the country⁷. The impact of these initiatives is recorded through the increased uptake of insurance and other financial services. According to FinScope, 15% of Tanzanians are using insurance services in 2017 compared to 13% in 2013⁸.

Key Partners

ACRE Africa: market leader in agricultural index insurance in East Africa functioning as a business facilitator and licensed insurance agent. It evolved as social enterprise from the “Kilimo Salama Program”.

ACRE Tanzania: subsidiary of Acre Africa that offers product development and pricing, advice on distribution channels, and client management. ACRE Tanzania receives technical support like actuarial modelling from Acre Africa.

UAP Old Mutual Insurance Company Ltd: primary insurer that provides insurance policies, receives premiums and settles claims. UAP Tanzania ensures compliance with TIRA⁹ regulations regarding capital, governance and reinsurance arrangements as well as product approval. UAP Kenya provides expertise.

| Population and economic indicators | |
|---|--------|
| Population in million (2016) | 54.3 |
| GDP growth (2015) | 7.0 % |
| Inflation (2015) | 5.6 % |
| Trade balance (% of GDP) (2016) | -1.6 % |
| Foreign direct investment, net (% of GDP) (2015) | 4.3 % |
| Net ODA received (% of GNI) (2015) | 5.8 % |
| Remittances received (% of GDP) (2016) | 0.8 % |
| Economic Freedom Index ¹ (Rank among 186 countries) (2016) | 110 |
| Poverty indicators | |
| GDP per capita (USD) (2015) | 864.9 |
| Gini Index (0= equality 100= inequality) (2011) | 37.8 |
| International poverty rate (2011; at 1.90 USD/day) | 46.6 % |
| National poverty rate (2011) | 28.2 % |
| National rural poverty headcount rate (2011) | 33.3% |

Table 1: Country's population and economic indicators⁶

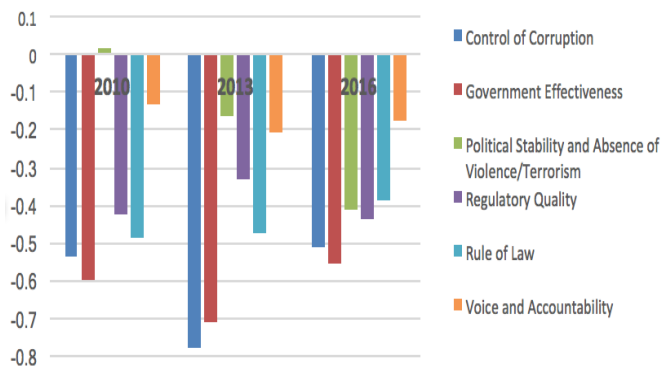


Figure 1: Governance indicators

¹ Heritage Foundation, (2017) Index of Economic Freedom, <http://www.heritage.org/index/ranking> Accessed October 18, 2017

² Figure 1: Governance indicators taken from: The World Bank Group (2017). Worldwide Governance Indicators database. Washington, DC. <http://databank.worldbank.org>. Accessed October 18th 2017

³ <https://data.worldbank.org/indicator/SP.POP.TOTL?locations=TZ>

⁴ https://www.theglobaleconomy.com/Tanzania/Employment_in_agriculture/

⁵ <https://data.worldbank.org/indicator/NV.AGR.TOTL.ZS?locations=TZ>

⁶ The World Bank Group (2017). World Development Indicators database. Washington, DC. <http://data.worldbank.org>. Accessed October 18, 2017

⁷ <https://cfi-blog.org/2013/12/23/tanzania-launches-national-financial-inclusion-framework/>

⁸ <http://www.fsd.or.tz/wp-content/uploads/2017/09/FinScope-Tanzania-2017-Insights-that-Drive-Innovation.pdf>

⁹ Tanzania Insurance Regulatory Authority

Swiss Re: global re-insurer who was engaged from the onset in Kenya. Swiss Re has provided reinsurance capacity as well as technical support to UAP Kenya via a reinsurance contract in which they bear one third of the risk.

Seed Co: leading regional seed producer that paid premiums for farmers who purchased their maize seed brand to promote the use of improved certified varieties. Provided on the ground training and support for farmers and intermediaries in the agricultural value chain.

One Acre Fund: non-for-profit social enterprise that offers in-kind loans (inputs, transport, insurance) to target farmers to promote increased investment in farming. Provided agronomic and financial related training to farmers and groups.

Airtel: regional mobile network operator that provides mobile money transfer platforms for payment of premiums and insurance compensation. Provided marketing support through below the line initiatives like short messages.

2. INTERVENTION APPROACH

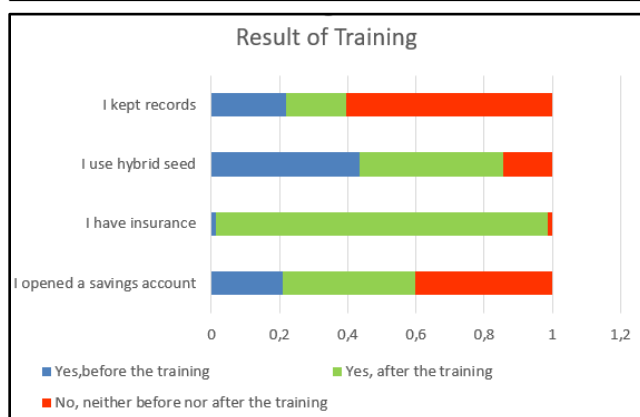
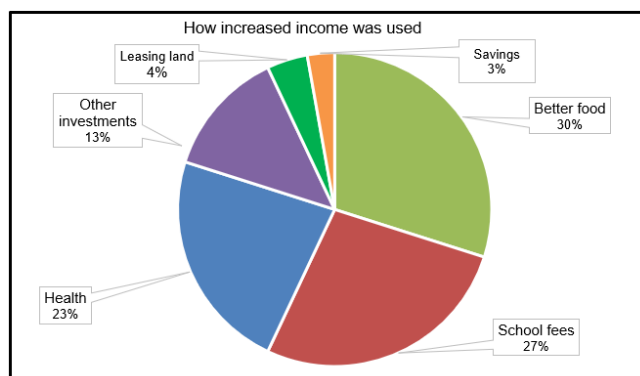
Capacity building needs

Following a market feasibility study by Syngenta Foundation for Sustainable Agriculture (SFSA) in 2013,¹⁰ ACRE Africa established ACRE Tanzania to jumpstart and subsequently upscale agriculture index-based insurance products in Tanzania co-funded by SCBF and SFSA from mid-2014 through the end of 2016. The market entrance was complemented by financial literacy and seed extension training of smallholder farmers also co-funded by SCBF and SFSA.¹¹

Main activity areas

The main activity areas were:

- 1) Identification of main risks faced by farmers.
- 2) Design of products that reflect farmer smallholder demand, meet insurability and regulation criteria and can be distributed efficiently.
- 3) Identification of viable distribution approaches through traditional and non-traditional aggregator channels. The selected channels were:
 - i. Lending institutions providing a loan linked product in Northern Tanzania / Iringa region (One Acre Fund)
 - ii. Agribusiness bundling of insurance and agricultural inputs in Southern Highlands / Arusha region (Seed Co)
- 4) Financial literacy and product awareness campaigns to increase insurance uptake through a robust financial education program that included manuals and information on weather index insurance, radio programs and automated reminders sent through SMS to smallholders.



Client level

In 2017, 24'809 smallholder farmers (two hectares or less) were insured in the Iringa region and 14'894 in the Arusha region. ACRE Tanzania conducted in 2016 a client value survey with 159 farmers. 42% of farmers reported increased income following the uptake of insurance; figure 2 and 3 above show reported behavior changes and reported usage of their increased income. This result could come from change in investment behaviors following the uptake of insurance, increased financial literacy following education campaigns, or use of hybrid seeds.

¹⁰ See the public version of the FS-07 feasibility study here: http://scbf.ch/wp-content/uploads/2014/03/FSW-07_Feasibility-Study_Tanzania_Syngenta-Foundation_Kilimo-Salama.pdf

¹¹ See the final report for FE-02 and FE-03 here: http://scbf.ch/wp-content/uploads/2014/04/FE-02-03-ACRE-Tanzania_edited1.pdf

Uptake of insurance: 97% of the farmers took insurance for the first time.

Increased savings culture: 40% of farmers opened a savings account, a small increase compared to the 33% who were actively saving prior to the intervention.

Use of hybrid seeds: 42% of farmers used hybrid seeds of which 70% reported a yield increase.

A 2018 study commissioned by the SCBF to evaluate outcomes found the following:

- The delivery system of bundling with inputs delivered value to the farmers by introducing the farmers to agriculture insurance, reducing the cost of product affordability and accessibility.
- There has been a net increase in value of assets, weekly consumption, maize production and productivity and education expenditure.
- The distribution model has a crucial influence on the success of the program as it ultimately steers the information received by the client. The package provided to farmers by One Acre Fund, who offers regular interaction with a clear institutional structure delivers the best results in terms of productivity, investment and satisfaction.
- The use of a mobile based system for product registration process increased accessibility and for the farmers, but technical problems hindered fully leveraging the value of this system.

Client profiles



Mr. Matonya, aged 45, provides for three children on his five-acre farm in the Iringa region on which he raises chickens and grows maize and beans.

“I heard about the seed insurance (replanting guarantee) on Radio Free Africa. The radio mentioned that the insurance would enable me to get a free bag of maize seeds in case of drought. After I heard this, I visited the agro-dealer to get more information. The insurance gave me confidence to try the Duma 43 hybrid seeds instead of planting the recycled seeds as I was used to. I noticed an increase in my harvest which encouraged me to continue using hybrid seeds and increase my acreage.”



Mr. Prosper John, aged 52, provides for five children on his six-acre farm growing maize, sunflower and beans, alongside raising chickens, in the Arusha Region.

“I was not aware about crop insurance until I bought two packets of maize seeds from the agro dealer close to our village, when I opened up the maize seed bags, inside each packet, I found a card which had information on crop insurance and how to register. I registered for the insurance and waited. I did not think it worked until I got a text message showing that I had received compensation on Airtel Money (TZS. 24'000 or 12 CHF). The next season I bought more packets of seeds and increased the area where I was planting maize. I also told my neighbors about the insurance.”



Mrs. Mwajuma Said Hamed, aged 61, helps support her seven children on her three-acre farm in the Iringa Region, growing maize and beans and raising poultry.

“Insurance has given me access to hybrid seeds and other modern farming inputs, something which I was not doing before. I have received training on how to farm as a business, so now I keep records of my activities, which am using to apply for agriculture loans. The insurance payout of TZS 144'000 (61 CHF) was used to repay my loan with One Acre Fund and finance part of my inputs for the next season”.

Partner financial institution level

ACRE Tanzania overachieved targets for Iringa, where the number of enrolled farmers surpassed the minimum target of 15'000. In Arusha, the target of 10'000 was reached but with delay. A total of 9,164 farmers received payouts worth TZS. 59'025'432 (25'661 CHF) between 2014 and 2015.

Through payouts to smallholders, One Acre Fund has been able to relieve farmers from part of their outstanding loan, providing protection, peace of mind and improving repayment rates. Due to increasing smallholders' demand for agricultural insurance, supply is rising on the corporate side, having started to tailor products and tender insurance programs.

While Seed Co shared the vision of providing insurance protection with input and used first-mover advantage, technological and process issues in implementation (failed registration, late bag replacement) impaired their ability to collect data, effectively issue payments, and rely on customer satisfaction for increased outreach.

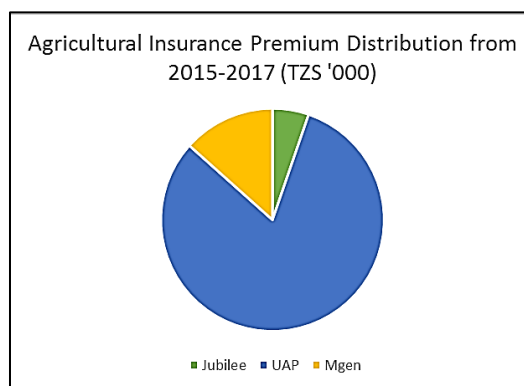


Figure 2: Agriculture insurance market in Tanzania.

UAP Insurance Tanzania experienced an increasing number of requests from different customers inquiring about agriculture insurance, strengthening staff know-how in the field. In addition, they received partnership requests from organizations such as NGOs and banks. Business development officer Damas Filled noted: *“the program served as an eye opener to our business, created many partnership opportunities and grew our agriculture insurance books. We believe it has made our brand stronger in the region.”*

The project has been invaluable for ACRE Tanzania to identify partners, understand the Tanzanian agricultural sector value chain and distribution landscape and prepare an effective country strategy.

Financial sector level

The pioneering work of ACRE Tanzania brought a host of new players into the agriculture field (e.g. PULA, Risk Shield, National Insurance Corporation (NIC), J.B. Boda and Africa Re) with most of them actively setting up between 2017 and 2018.

ACRE Tanzania trained staff in several organizations on agriculture insurance and supported in the development of simplified client information request forms. Through these partners, agriculture insurance has grown to cover agricultural investments worth over USD 7.4 million. In line with this growth, ACRE Tanzania has signed contracts with the National Insurance Corporation and Jubilee Insurance companies to support continued scale-up of agriculture insurance.

The insurance regulator Tanzania Insurance Regulatory Authority (TIRA), through interactive experience with ACRE Africa/ACRE Tanzania, is now supporting the development and innovation of micro insurance products. It developed micro-insurance guidelines in 2016 and engaged with ACRE Tanzania to issue a local license. More recently, TIRA has been advocating value added tax exemption for agriculture insurance to improve affordability for smallholders. Allowing distribution of micro insurance products through non-traditional mechanisms like mobile phones has increased accessibility and reduced distribution costs for these products.

3. LESSONS LEARNT

ACRE Tanzania encountered a number of hurdles and recorded the following lessons:

Challenges

- i. **Regulatory challenges:** Strict regulation of foreign owned companies and harsh regulatory requirements for registration of micro insurance agents. The latter necessitated exceptions and caused delay in approval of a ‘no-objection’ for a mobile based agriculture insurance product. Legal bureaucracy in the registration of a foreign owned company
- ii. **Technical challenges:** The preferred mobile network operator was hampered by technical difficulties from providing a local management system or integration into ACRE’s own system
- iii. **Product design challenges:** Complex nature of the product slowed development process.
- iv. **Process Challenges:** Delayed claim payments due to multiple issues including delayed premium (and premium subsidy) payments, reliance on manually verifying and adjusting losses by the insurer and reliance on a Kenyan rather than Tanzanian underwriter.

Effects of Challenges on the project:

- i. **Delay in launch:** The mobile based insurance product planned for the main March rain season in Arusha had to be postponed because of regulation and the technology not being ready.
- ii. **Relationship handling:** Based on the relationship in Kenya's existing market, Vodacom was the preferred partner, but a mismatch in relative size and priorities hindered cooperation in Tanzania.
- iii. **Farmer's perception:** Missed the opportunity to combat the pre-existing perception that "insurance does not work." Farmers were disappointed with late payments and criticized the insurance process, but once paid they were satisfied.

Rectification actions:

- i. **Partner selection:** Recruitment of a smaller mobile network operator (Airtel) who, due to their challenger position, were willing to develop missing technology and show flexibility.
- ii. **Agile partnership:** ACRE Tanzania worked with Seed Co and Airtel to move forward and launch the product during the ongoing planting season in the Lake zone, avoiding a full lost year.
- iii. **Building trust with regulator:** Endorsement and generation of good will among the regulator and the positioning of ACRE Tanzania services was pivotal for the project and for broad industry growth.
- iv. **Increased interaction with consumers:** Frequent farmer and stakeholder surveys.
- v. **Improved turn-around:** ACRE Tanzania worked with the ACRE Kenya and UAP Kenya team to improve the turn-around time in claims adjustments and initiated development of an automated system to ease the process.

Lessons and recommendations:

- i. **Clear roles:** Clear and complementary value proposition needs to be established for all partners from the onset. Strive for inter-operable solutions and where not possible, include specificities in training material.
- ii. **Alignment and preparation:** Sensitivity of preparation and roll out of agricultural sector products are heavily dependent on the crop cycles in a region. Full local partner alignment is needed to allow execution success
- iii. **Engagement with regulator:** Increased regulator-partner engagement and consistent follow up with a local legal counsel.
- iv. **Over-communicate with farmers:** Transparent and responsible pricing. Inclusion of farmers / end users to determine product and pricing. Simple to understand communication to farmers and stakeholders on the products developed

Moving forward, as a licensed and regulated insurance agent in Tanzania, ACRE Tanzania has become an excellent potential implementation partner for SCBF and SDC's smallholder promotion programs in the central corridor of Tanzania. ACRE Tanzania is also borrowing lessons from pilots in Kenya to improve the delivery of agriculture insurance in Tanzania.