

ACRE Africa cultivating resilience through agricultural insurance

By Murimi Gitari

farmers estimated to lose up to 90 percent of their expected yield due to climate risks in Africa, agriculture insurance should be featuring prominently in every farmer's plan.

Many of farmers are, however, reluctant to invest in insurance schemes.

Lack of trust in insurance products has been identified as one of the reasons farmers don't buy premiums.

Another challenge is that smallholder farmers do not engage with latest technologies and practices that can support resilience such as the planting of stress-tolerant crop varieties, adherence to advisories and implementing good agronomic practices.

Despite more African countries developing agricultural insurance policies in recent years, uptake remains low among farmers.

Farid Wangara, the Chief Operations and Principal Officer at Agriculture and Climate Risk Enterprise (ACRE Africa), says there is need to design localised insurance solutions to improve uptake among smallholder farmers.

He cites relative success of the National Agriculture Insurance Scheme which supports the payment of premiums as opposed to a yield-based multi-peril crop insurance.

ACRE Africa has developed a wide range of affordable insurance products, including multiperil crop insurance, weather index insurance, area yield index insurance, hybrid crop insurance, picture-based crop insurance/monitoring, moisture index insurance and micro insurance-credit life.

Farmers are able to leverage on technology to manage climate risks through some of these products. They access tailored crop insurance to mitigate crop failure as a result of adverse weather patterns.

A combination of satellite ad weather station data is usually used to determine whether a farmer receives a payout directly through a mobile phone in case of drought or excess rainfall on their farms.

For instance, there is a microinsurance product by ACRE Africa known as Bima Pima, which translates to "insurance in affordable bits."

When a season starts, farmers buy a Bima Pima scratch card with a bag of seeds or fertiliser, activates the card through a mobile phone and pays an initial premium of \$50 cents. ACRE Africa then geo-tags the farm using mobile localisation service.

Smart design and digital innovation offer the farmers the ease of purchasing the scratch cards at local agri-dealers, use of the system, and the options to pay for the premium in small amounts.

Another product that is quite manageable to farmers by ACRE Africa is its picture-based insurance (PBI) an innovative insurance scheme supported by the International Development Centre (IDRC) in partnership with the Australian Centre for International Agricultural Research (ACIAR).

"The PBI project is usually easy to join. Farmers only dial a USSD code and choose the type of crop they want to cover after which they are automatically enrolled to the scheme," says Wangara.

The product rollout is supported by a network of champion of farmers to enhance its uptake and trust levels. "These champion farmers are the key opinion shapers in the villages they stay. The PBI product allows farmers to take photos using their mobile phones but we also rely on satellite photos. The champion farmers use an app known as SeeItGrow to take photos of registered farmers' crops throughout the season that are thereafter used in evaluation till the end of the season," says Wangara.

Amos Tabalia, the Chief Innovations Officer (CIO) at ACRE Africa, says that farmers are able to take periodic pictures of their farms from pregermination all the way to harvest.

The pictures are shared remotely to ACRE Africa's agronomists who evaluated and co-relate data from these images with satellite data on rainfall ranges.

"Customised advisories are then triggered to these farmers on farm control measures to be taken based on the analysis done. This has got the farmers directly involved in the process thus improved farmer perceptions. ACRE is now integrating AI and Machine Learning to automate this process and improve the analysis and feedback time and provide prompt payouts to farmers," says Tabalia.

Other than being insured through the PBI project, the farmers also receive training on how to protect crops against climate shocks, get connected with companies that sell stress-tolerant seed varieties and receive information services that encourage them to adhere to good agricultural and agronomic practices.



Esther Kanini preparing her farm, Machakos County Photo Credit: ACRE Africa

Through its partnership with ZEP-RE (PTA Reinsurance Company), a leading reinsurer in Africa, ACRE Africa has managed to train regulators and insurers in 11 African Countries in 2022 and 2023.

The organisation has grown its presence from three countries to more than 10, with smallholder farmers increasing their premium amounts from \$50 cents to over \$10 per season.

The organisation operates in Kenya, Rwanda, Tanzania, and Zambia with projects in Uganda, Ghana, Malawi, Senegal, Nigeria, Zimbabwe, Ethiopia and Somalia.

"Since inception, we have served more than 3.7 million farmers from a start of one. In the year 2022 we insured slightly above 300, 000 farmers while in 2023 the figures of the farmers that we insured shot up to almost 700, 000 farmers and for this year we are projecting to hit above a million farmers," Wangara says.

An increase in the amounts of claims settled shows the viability of agriculture insurance as a risk mitigation solution.

"There is value proposition for our clients where they can link different players in the value chain from financial institutions, insurers, input companies, re-insurers, national governments, and farmers," says Tabalia.

He says that merging trends in agricultural insurance and risk management in Africa, including use of technology to automate processes of accessing crop damage and quicken claims payment to farmers, point to a significant increase uptake in future.

"Some of the other emerging trends are adopting technology in innovating solutions that link and solve problems for stakeholders in the agricultural value chain. An example is the Credit Scoring tool that ACRE has developed that allows lending to farmers. The las thread is that through partnership with research organizations and breeders, we are promoting adoption of improved varieties that have been breed to withstand the current climatic conditions and opposed to having farmers stuck on planting varieties bred over 20 years ago," says Tabalia.



Agnes Mutavi, sifting her produce, Makueni County. ACRE Africa