Helping farmers grow confidently

syngenta foundation for sustainable agriculture

Agricultural insurance solutions for Asia

Agricultural production and food security have made impressive progress in South and South-East Asia over recent decades. The improvements have played a key role in fueling economic growth. However, erratic weather threatens farmers' livelihoods, as do pest and disease. Poor harvests can prevent farmers from

repaying their loans. They are then naturally unwilling to access credit or use modern inputs in the next season. Yields and income therefore typically fall again.

Agricultural insurance cuts through this vicious cycle. It relieves smallholders of some of their risk, and by providing a safety net, encourages them to invest in future harvests.

The Syngenta Foundation and agricultural insurance

The Syngenta Foundation for Sustainable Agriculture (SFSA) has been working on agricultural insurance since 2009*. We started by developing innovative and affordable insurance tailored to smallholders in East Africa. In 2014, we created an independent social enterprise (ACRE Africa) with operations in three countries, over 200,000 farmers insured and an innovative range of micro-insurance products.

SFSA's Agricultural Insurance Solutions (AIS) Team is now using its experience to bring smart risk mitigation strategies to farmers in Asia.

SFSA is a non-profit organization established under Swiss law,

with core funding from Syngenta. We run a wide range of initiatives across Africa, Asia and Latin America. We work with private and public sector partners in developing countries and emerging economies. Our aim is always to help small farmers raise their yields and access profitable markets. With tailored micro-insurance products, farmers can confidently invest in quality inputs, get access to credit and increase their productivity. Further information is available on www.syngentafoundation.org.

The SFSA AIS Team operates as an insurance intermediary. We are not an insurance company, but work with local insurers and other stakeholders. We monitor and assess risk, and develop insurance products specifically for smallholders. These products typically cover a variety of crops against weather risks like drought, storms, flood and erratic rains. Other examples include yield cover.

*SFSA's *Kilimo Salama* insurance project in Africa won the 2012 Financial Times Award for Technology in Sustainable Finance, the 2013 Tech Award for Economic Development and the 2013 AON Client Innovation Award. The team and insurance products have been featured in The New York Times, The Guardian, East African Business Week, Christian Science Monitor, Voice of America, BBC, The Economist and other media.

SFSA Agricultural Insurance

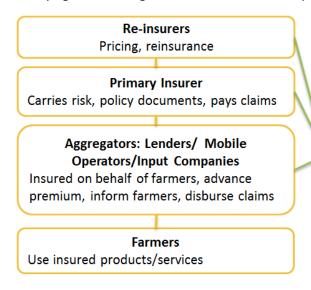
Mission: We develop and implement agricultural insurance for smallholder farmers across Africa and Asia.

Goal: We want agricultural index insurance to be widely available for smallholders. We aim to provide affordable risk mitigation tools to the most vulnerable farmers so they can better access credit and quality inputs, and ultimately make more profitable harvests.

Broad experience and a unique combination

SFSA's AIS Team has a wide range of experience. Our areas of expertise include *Reinsurance – Actuarial – Underwriting – Product and Business Development – Country-Specific Knowledge – Agronomy and Agriculture–Insurance Training and Capacity Building – Public and Private Sector Resource Mobilization.*

We offer a range of services such as technical product design, stakeholder coordination and business development. That combination is usually unique in agricultural insurance value chains. SFSA's AIS Team helps build the capacity of local insurance companies to add index products to their portfolios. We partner with nearby agricultural organizations to tailor and implement the best-suited products.



SFSA's Agricultural Insurance Solutions

Headquarters in Switzerland

- Product Development
- Coordinate International Partners

Local country offices

- · Marketing and Distribution
- Insurance Education
- Data Collection/Contract Monitoring
- Dry Runs and Product Improvement

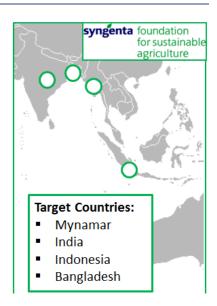
New initiatives for Asia

The SFSA AIS Team is prioritizing Indonesia, Myanmar, Bangladesh and India as the first countries for insurance operations in Asia.

Entrance into each new country requires careful preparation. We conduct feasibility studies, develop local capacity, run pilots, and then roll out in full.

Feasibility studies assess the local relevance and viability of insurance as a risk management tool. This requires us to understand the challenges facing agricultural value chains. Our team uses desk research, stakeholder meetings, field visits, farmer feedback, mobile market intelligence and financial screening to identify value chains with high insurance potential. Identifying innovative and dedicated aggregators reaching large numbers of farmers is vital. With these clients, the team tailors products.

The pilot phase will be accelerated in the initial countries by adapting experience from ACRE Africa.



Products that match local needs

Smallholders have widely varying access to inputs, credit, aggregators and contracts. So our team has developed, tested and refined a diverse portfolio of agricultural insurance products to match.

Weather and yield indices keep premiums low

These products use weather or yield data instead of on-farm observations. Traditional agricultural insurance relies on expensive field visits to assess losses. We develop products that use rainfall data monitored by automated weather stations or satellites. Using carefully correlated indices instead of field visits, the products can be distributed far more cost-effectively. Staff can look after many more farmers.

The rainfall data are linked to agronomic models. These divide the growing season into phases from germination to harvest. Many crops such as maize/corn, rice, wheat, potato and coffee need varying amounts of rainfall throughout the season. Drought, excess or badly-timed rain can all harm the crops.



In addition to weather insurance, AIS also develops yield-based products based on local data. Yield products can cover farmers against losses from disease and pests, in addition to flood damage. Flooding is a serious concern for rice growers, for example.

Our index models automatically trigger any necessary pay-outs, so farmers do not need to submit claims. The system is therefore highly objective and transparent.

Insurance improves loans access for smallholders

Access to affordable agricultural credit at the start of the season is essential. Loans enable farmers to purchase improved seed, fertilizer, crop protection and other inputs. Combining agricultural insurance with the financial products offered by banks and microfinance institutions is therefore a natural step. The insurance protects credit institutions against widespread default after bad weather, and farmers against the inability to repay loans after a poor harvest. Agricultural credit and insurance are complementary products; together, they can reach more and more smallholders.

Credit-linked insurance brings together aggregators (e.g. a microfinance institution, bank, contracting agribusiness, or input company) and the smallholder beneficiaries. Aggregators are usually familiar with insurance and aware of their risk exposure on loans, particularly due to bad weather. Smallholders generally have little experience with insurance; significant financial education and communication are therefore required. In a credit-linked program, the team leverages upon the relationship of trust between the aggregator and farmer to provide financial literacy training.

The loan-giving institution ideally prepays the premium on the smallholders' behalf. Repayment follows after harvest. If there is an insured loss, the amount to be repaid is reduced. These products are often compulsory

on all loans from an organization: if farmers want to access credit, it comes with insurance. This combination helps to create, grow and maintain a market for agricultural insurance products.

Mobile phones increase insurance reach and efficiency

Mobile use is extensive and growing throughout Asia. This provides a new means to reach and register farmers who are using improved inputs, but may not be otherwise organized in large groups for easy insurance distribution. Our first product here is essentially 'insurance in a bag'. An input company pays the premiums and farmers then follow instructions in the bag (e.g. of seeds), registering via SMS. Corresponding data from mobile phone companies then enable identification of the farmers' location and therefore of their weather. If conditions trigger a payout, this goes straight to farmers via mobile phone.

What partners say about us

David Hylden, One Acre Fund's Country Director in Tanzania - "We've partnered with Acre Africa since 2013 to improve the weather risk mitigation strategies for our lending to smallholders. Insurance cover has enabled us to offer lending services to more farmers; we now serve over 9,000 smallholders in Tanzania."

Raphael Rurangwa, Director General of Planning at Rwanda's Ministry of Agriculture - "Insurance for smallholder agriculture is key. The Rwanda Agriculture Transformation for Smallholders is taking shape and Acre Africa has been an important partner in this work with over 100,000 farmers insured across the country."

Joseph, smallholder maize farmer in Kenya on the Seed Co Replanting Guarantee - "If yield is high, you can buy everything for next year. If not, you may struggle to make ends meet. My seeds germinated, but the rains stopped soon after. I received a pay-out. I was very happy to receive the money."

Would you like to know more?

Whether you're from a company, government, donor, NGO, agribusiness, creditor or any other organization interested in smallholder-focused agricultural insurance, we'll be delighted to discuss your needs.

Please contact Olga Speckhardt, SFSA's Head of Global Insurance Solutions: olga.speckhardt@syngenta.com.

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