Satellite-based weather index insurance --GC [1]

Country of Operation: Mozambique
Region: Africa
Sub Topics: Business viability, Business models, Other channels, Data analysis and processing, Consumer protection, Subsidies, Premium collection, Product development, Improving value, Agriculture, Agriculture

Organizational Overview

Guy Carpenter & Company, LLC (GC) has been active for 85 years as a specialist in risk and reinsurance. With 50 offices worldwide, the company offers reinsurance solutions for clients across the globe for a variety of risks, including agriculture, life, accident and health, political and natural disasters, property and workers compensation.

Activities Overview

Until recently, no market for agriculture insurance products existed in Mozambique leaving poor farmers in the country highly exposed to natural perils. This hinders their access to third-party capital, demotes the use of new farming techniques/technologies and overall hampers the ability of smallholders to exit poverty. As a direct result of an IFC GIIF Local Capacity Building grant awarded to the firm in 2011, GC ? in conjunction with the Asia Risk Centre Inc.? designed, developed and deployed two agriculture weather index insurance pilots in Mozambique in late 2012. Index-based insurance products cover maize farmers in the district of Chimoio and cotton production in the districts of Lalaua and Monapo.

Guy Carpenter?s index insurance is distinguished by several unique features, including its use of a ?portfolio pricing? model where the sum insured in a given region forms the basis for risk calculation. Compared to the alternative where each individual plot is priced separately, this method can result in lower premium costs by including more farmers and diverse areas in a group.

Guy Carpenter also implemented its product at the portfolio or ?meso-level?, where an aggregator (e.g. a delivery channel, association or other farmer group) purchases one insurance policy to cover its group members. The experience of other GIIF clients has shown that portfolio sales are less expensive than retail index insurance sold to individual clients.

Guy Carpenter?s index insurance model is supported by close public-private collaboration which is critical when setting up new markets. Two agribusiness firms, Olam and SANAM, covered their cotton farmers with index insurance designed by Guy Carpenter and provided by two insurance companies: Hollard and EMOSE. The premiums for the insurance were paid by OLAM and Sanam.
Learning Agenda

- What are the preconditions that need to be achieved to build scale in index insurance products?
- What are the lessons that can be drawn from one country to the other (specific country examples to be developed and used)?
- Can portfolio insurance yield better results than individual insurance?
- Can portfolio insurance yield better value for the clients than individual insurance?
- Can index-insurance be used to develop catastrophic and disaster covers that can be offered by the government to cover large areas?

Latest Updates

Index insurance should increase the overall resilience of the cotton sector in MZ thereby giving smallholder farmers the ability to recover from droughts and other adverse weather phenomena more quickly and with fewer deleterious effects. In turn, this should make the cotton sector more attractive to investors and lenders creating more opportunities for farmers.

Lessons

**Education improves product design.** Educating farmers and delivery channels on the nuances of index-insurance can continuously improve the quality of product design through the acquisition of more and better data and farmer/delivery channel input.

**Developing the market needs the involvement of multiple stakeholders.** Increasing the penetration of index insurance in Mozambique through a multi-stakeholder approach to value chain development where all actors ? from the national government down to individual farmers ? are invested in agricultural risk management. The Cotton Institute of Mozambique (IAM) plans eventually to expand index insurance coverage to all cotton farmers in Mozambique ? approximately 200,000 farmers - and the project is intended to serve as a framework for expanding index insurance to other agricultural sectors in Mozambique.

**The lack of data regarding historical exposure and crop yield increases uncertainty surrounding product design and associated basis risk.** Disseminating pertinent and oftentimes highly technical information related to the product design down the value chain to individual smallholder farmers can also be quite challenging.

**Contributor/s:** The content of this page is from the project's page on the GIIF website.

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