



## MOZAMBIQUE

### BACKGROUND

In Mozambique, agriculture accounts for approximately 32% of GDP and involves over 81% of the population (CIA, 2012). Yet, only a fraction of Mozambique's potentially arable land is currently under cultivation. This lack of arable land usage is in large part due to risk aversion on the part of both farmers and financial institutions, since natural hazards such as droughts and floods regularly affect agricultural production.

### PROJECT DESCRIPTION

As a direct result of the World Bank Group Global Index Insurance Facility (GIIF) local capacity-building grant awarded to Guy Carpenter in 2011 this firm – in conjunction with the Asia Risk Centre Inc. – designed, developed, and deployed two weather-index insurance pilots in Mozambique in late 2012. These index-based insurance products cover maize farmers in the district of Chimoio and cotton farmers in the districts of Lalaua and Monapo.

Guy Carpenter's index insurance was distinguished by several unique features, including its use of a "portfolio pricing" model in which the sum insured in a given region forms the basis for risk calculation. Compared to the alternative model, in which each individual plot is priced separately, this method can result in lower premium costs by including more farmers and more diverse areas within a group. Guy Carpenter has also implemented its product at the portfolio or "meso-level," in which an aggregator (e.g. a delivery channel, association, or other farmer group) purchases one insurance policy to cover all of the members of its group. The experience of other GIIF clients has shown that portfolio sales are less expensive than retail index insurance sold to individual clients.

This index insurance scheme was supported by strong public-private collaboration, which is critical when setting up new markets. In Mozambique, two agribusiness firms, Olam and Sanam, distributed this product to their cotton farmers. Two insurance companies, Hollard and EMOSE (Empresa Mocambicana de Seguros, SA), underwrote the policies, and the Cotton Institute of Mozambique (IAM) coordinated this successful public-private partnership.

### RESULTS AND IMPACTS

The ability to educate farmers and distributors on the nuances of index insurance, and to continuously improve the quality of product design through the acquisition of more and better data and farmer/delivery channel input is critical. In addition, 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 has also contributed to the project's success.

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

### CHALLENGES AND NEXT STEPS

The lack of data regarding historical exposure and crop yield has been the project's biggest challenge to date since it increases uncertainty surrounding product design and associated basis risk. Disseminating pertinent and oftentimes highly technical information related to product design down the value chain to individual smallholder farmers can also be quite challenging.

IAM plans to eventually expand index-insurance coverage to all of the approximately 200,000 cotton farmers in Mozambique. This project is intended to serve as a framework for expanding index insurance to other agricultural sectors in Mozambique.

PROJECT SNAPSHOT	
<b>Market Launch</b>	2012
<b>Clients</b>	43 000
<b>Partners</b>	Insurers: Hollard Mozambique, EMOSE
<b>Capital Insured</b>	Reinsurers: Swiss Re
<b>Insured Assets</b>	Delivery Channels: IAM, AgDevCo
<b>Insured Perils</b>	Weather index insurance
<b>Regulatory Environment</b>	Maize, soya, cotton
<b>Data</b>	Dry spells, excess rain, fire (subject to loss verification)

## PARTNER FOCUS



<b>Partner Information</b>	Guy Carpenter & Company, LLC received a US\$1.0 million grant from the International Finance Corporation (IFC), a member of the World Bank Group, to help develop a market for weather-index-based microinsurance in order to benefit farmers in Mozambique. Under this grant, Guy Carpenter is collaborating with the global catastrophe risk experts, Risk Management Solutions (RMS), to design and implement new and affordable index-based insurance products for flood and drought risks. RMS provides the complete risk modeling and risk quantification metrics necessary to transparently price the risk for products that minimize operational costs, thereby facilitating activation of the program.
<b>Product available</b>	Weather-index insurance for maize and cotton
<b>Total Insurance Portfolio (Total Sums Insured):</b>	Approximately US\$230,000 (2012 drought payouts exceeded premiums paid, but that is expected for particularly bad years.)
<b>Average Cost of Insurance</b>	15% of sum insured
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### About Global Index Insurance Facility

The Global Index Insurance Facility (GIIF) is a multi-donor trust fund that works to provide access to finance to smallholder farmers, microentrepreneurs, and microfinance institutions. GIIF supports the development and growth of local markets for indexed/catastrophic insurance in 31 developing countries, primarily in Sub-Saharan Africa, Latin America and the Caribbean, and Asia Pacific. The facility is part of the World Bank Group’s Finance & Markets Global Practice.

For more information, please visit [www.indexinsuranceforum.org](http://www.indexinsuranceforum.org).  
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