

Agricultural Weather Index Insurance in Senegal

Global Index Insurance Facility

WORLD BANK GROUP



Agricultural Sector in Senegal

- Over 70% of the agricultural sector in Senegal is rain-fed and is exposed to the high volatility of weather conditions, contributing to low productivity and yields and negatively impacts the livelihoods of small holder farmers.
- Between 30% and 47% decrease in welfare during the period 2011–2015, especially in rural areas, where large parts of the population rely on rain-fed agriculture
- Lack of access to credit is a key constraint to improvements in agricultural productivity as only 4.5% of rural adults in Senegal have an account at a financial institution.
- Most financial institutions view the exposure of agriculture to weather shocks as a key constraint to credit expansion.
- More recently, major drought in 2011 affected 850,000 people and had a significant impact on repayments and supply of credit during the following year.



Project Background

- The Ministry of Finance of Senegal requested the World Bank Group in 2009 to assess the potential of index-based insurance and a pilot project began in 2012.
- The study recommended developing weather index—based insurance for commercial farmers and suggested a pilot for groundnut seed farmers in two geographic departments.
- Created in 2008 as a public-private partnership, the National Agricultural Insurance Company of Senegal (Compagnie Nationale d'Assurance Agricole du Sénégal, or CNAAS) is in charge of underwriting crop and livestock insurance.
- As a follow-up to the feasibility study, the CNAAS requested in 2011 financial and technical assistance from the World Bank Group to pilot test index-based insurance for groundnut farmers.

The Global Index Insurance Facility (GIIF) was involved regionally with the Inter-African Conference on Insurance Markets (Conférence Interafricaine des Marchés d'Assurances, or CIMA), an integrated insurance industry organization with membership in 15 French-speaking African countries. A key achievement of CIMA has been the adoption of regulations on microinsurance and index-based insurance (CIMA Book VII).











Project Objective

The project's objective was to offer financial protection to farmers against drought as a way to enhance their access to credit and productivity and to decrease their vulnerability to agriculture shocks.

On the public sector side, support has been provided to the insurance regulator — the National Insurance Directorate (Direction Nationale des Assurances) as well as to the public insurer, CNAAS.

On the private sector side, insurance broker PlaNet Guarantee (PG) has also received support. The index-based insurance pilot project started in 2012, with a focus on groundnut, maize, and millet farmers, using rainfall data collected by automated weather stations.



Stakeholders

Government of Senegal

has played an important role through its semipublic insurance company, CNAAS, by providing a 50% subsidy for insurance premiums and a favorable legal and regulatory environment.

GIIF and donors

have allowed economies of scale to be achieved through joint investments in automated weather rain gauges.

The National Agency of Civil Aviation and Meteorology

has provided weather data.

Swiss Re

has provided reinsurance.



Research institutes and NGOs

implemented the product design.

Farmers' organizations

have acted as delivery channels for index insurance.

PlaNet Guarantee

has acted as the insurance broker.





Results

- According to CNAAS, the total number of index insurance policies issued to date is 42,393.
- In particular, groundnut index—based insurance has reached 13% of all groundnut seed farmers. And customer satisfaction is strong, with 90% of groundnut farmers indicating their intention to renew their insurance subscription the following year.
- Low and delayed rains in 2013 and 2014 triggered large payouts: 45% of insured groundnut seed producers received a partial payout in 2013, and 48% received a partial payout in 2014, a loss ratio of 65% and 87%, respectively.
- Regarding access to credit, farmers' cooperatives have indicated a higher bargaining power in their relationship with financial institutions, which could translate into better borrowing conditions in the future.
- GIIF's experience has also spurred other insurance initiatives, such as the upcoming West African Development Bank (Banque Ouest Africaine de Développement, or BOAD) index-based insurance project focused on cotton production.



Next Steps

- Explore the feasibility of meso-level options with the private sector in the coming year.
- Provide assistance to BOAD in designing its cotton index—based insurance initiative.
- Explore synergies with other index-based insurance initiatives through the Risk Transfer Working Group of Senegal.
- Investigate ways to engage with the government on supporting agriculture, agriculture finance, and insurance.

About Global Index Insurance Facility

The Global Index Insurance Facility (GIIF) is a dedicated World Bank Group's program that facilitates access to finance for smallholder farmers, micro-entrepreneurs, and microfinance institutions through the provisions of catastrophic risk transfer solutions and index-based insurance in developing countries. Funded by the European Union, the governments of Germany, Japan, and the Netherlands, GIIF has facilitated more than 1.8 million contracts, covering approximately 7 million people, primarily in Sub-Saharan Africa, Asia, and Latin America and the Caribbean.

For more information, please visit www.indexinsuranceforum.org. Join us on LinkedIn: Global Index Insurance Forum Group.









