Using insurance to protect farmers against drought in Senegal

The International Fund for Agricultural Development (IFAD) and the World Food Programme (WFP) have joined forces to help make weather index insurance available to farmers in Senegal. Farming is an uncertain and risky business, especially for poor smallholders in remote areas of developing countries. While insurance is one of the tools that farmers in developed countries use to cope with risk, those in the developing world often lack this and other resources.

Index insurance, a type of agricultural insurance, uses data rather than in-field assessment to determine when crop losses occur as a result of drought or other production risks. This avoids the costly journeys and arduous, long-term loss assessments that prevent insurance providers from offering coverage to rural farms. And by lowering administrative costs, it makes insurance affordable and accessible to smallholder farmers.

This initiative builds on the IFAD-WFP Weather Risk Management Facility (WRMF) partnership on insurance, as well as two other programmes in Senegal: the Programme d’Appui au Développement Agricole et a l’Entrepreneuriat Rural (PADAER) (Support to Agricultural Development and Rural Entrepreneurship Programme), financed by IFAD, and the R4 Rural Resilience Initiative of WFP.
One of the main risks faced by smallholder farmers in the area is drought. PADAER supports farmers’ organizations with a package of inputs and services, reaching 50,000 households through 975 producer organizations in the regions of Matam, Tambacounda, Kedougou and Kolda.

The R4 Rural Resilience Initiative enables vulnerable rural households to increase their income and food security in the face of increasing climate risks. It combines four risk management strategies: risk reduction, risk transfer (insurance), prudent risk-taking and risk reserves. By 2017, it was covering more than 6,500 households with index insurance in the regions of Tambacounda, Koumpentoum, Kolda and Kaffrine. An additional objective is to contribute to achieving scale and sustainability of insurance by partnering with ongoing insurance initiatives and strengthening community and country ownership. While there is an active agricultural insurance sector in Senegal, partnering with the private sector has helped expand opportunities.

**APPRAOCH**

The WRMF, thanks to financing from the Agence Française de Développement, was able to set up a partnership with R4 and its private sector collaborators. With R4 support, PADAER could then introduce index insurance for the first time, in 2015.

By 2017, three different index insurance products were available to members of farmers’ organizations to protect against the risk of lack of rainfall. In Tambacounda, the product is based on remotely sensed data and is designed by the International Research Institute for Climate and Society (IRI). It does not target a specific crop. In Kolda, insurance uses data from ground-based rain gauges, and is available to maize and rice farmers. These indices are designed by the private insurance intermediary PlaNet Guarantee, the national agricultural insurance company of Senegal (CNAAS) and the French Agricultural Research Centre for International Development (CIRAD).

**How it works**

The insurance is included in the package of inputs and services offered to members of farmers’ organizations in PADAER. These are the main steps:

1. **Education**
   R4, with its partners, trains the PADAER programme team and farmers’ organizations on risk management and insurance each year. This helps the programme team manage the process, and helps farmers make more informed purchase decisions.

2. **Targeting**
   R4 and PADAER jointly choose the farmers’ organizations that will be involved in distribution, avoiding duplication in areas where insurance is already offered.

3. **Registration**
   Each farmer chooses whether they want to pay to add index insurance to the package or not. For efficiency, registration is then conducted at the level of the farmers’ organization or union.

4. **Distribution and premium payment**
   R4 helped PADAER define the distribution channels and premium collection method. PADAER partially subsidizes the whole package of inputs over three years, before transitioning its participants to market prices. To make the process more efficient, the farmers’ organizations or unions are responsible for collecting members’ premium contributions and pay this directly to CNAAS. PADAER also transfers the subsidized part of the premium to CNAAS.

5. **Payouts**
   In the event of losses, payouts are made to the farmers’ organizations or unions to distribute to their members. This happens in a claims settlement ceremony involving the different insurance stakeholders.
RESULTS

Outreach to farmers in need

From the first trial in 2015 with seven farmers’ organizations in Tambacounda, farmer demand has steadily increased year-on-year. By 2017, smallholders in 69 PADAER farmers’ organizations and unions within Kolda and Tambacounda were participating. Further scaling up is planned for the next phase of PADAER. Farmers received payouts due to poor rainfall in 2015 and 2016. R4 and PlaNet Guarantee also helped train key members of farmers’ organizations in index insurance and risk management.

All PADAER cooperatives in Tambacounda and Kolda were trained in index insurance and risk management by R4.

Development of a sustainable insurance sector

The public-private partnership approach is helping to expand access to insurance for smallholder farmers and make this access sustainable over time. The three products offered in PADAER were already on the market, but not reaching all the farmers who wanted them. By joining forces, R4 and PADAER helped broaden the market and meet farmers’ needs. Some of the other main players include CNAAS, which issued all policies, and PlaNet Guarantee, which provided additional support for client education, registration and distribution.

Innovation

The initiative was able to reach more smallholder farmers with insurance because of these key elements:

- **Bundling of index insurance with inputs and services**, which brings more value than just insurance on its own.
- **Aggregating distribution through farmers’ organizations and unions**, which helps the market efficiently serve the hardest to reach. Farmers’ organizations also directly benefit from this distribution model. CNAAS pay them ten per cent of premiums collected for the role they play.
- **Using satellite data**, for example in Tambacounda, where it has enabled expansion to regions where populations are dispersed and ground data is lacking and difficult to acquire.

<table>
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<th>2015</th>
<th>2016</th>
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<th>Total</th>
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<tr>
<td>Number of farmers’ organizations</td>
<td>7</td>
<td>48</td>
<td>69</td>
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<tr>
<td>Number of insured farmers</td>
<td>233</td>
<td>604</td>
<td>706</td>
<td>1,543</td>
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<td>Total premium (in US$)</td>
<td>16,454</td>
<td>33,617</td>
<td>31,702</td>
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<td>Total sum insured (in US$)</td>
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<td>246,809</td>
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<td>Claim ratio</td>
<td>135%</td>
<td>37%</td>
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<td>Number of farmers who received payout</td>
<td>233</td>
<td>171</td>
<td>NA</td>
<td>404</td>
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</tbody>
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LESSONS LEARNED

Challenges and recommendations

- **Client understanding.** Not all farmers’ organizations accepted the integration of the product into the input package, and delays in raising and collecting the cash contribution remains an issue with some organizations. Deeper awareness-raising is needed.
- **Ownership.** There are remaining gaps in the target areas where insurance could be used. Capacity-building in business planning could support CNAAS to identify and fill these market segments by itself.
- **Targeting.** More than one insurance initiative in one area can create a risk of duplication of products and people covered, but by working together, the R4-PADAER partnership has helped with this coordination.

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PADAER participants and programme coordinator following a training session by R4.

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Opportunities

- Improved food security. Working together, R4 and PADAER can have a greater impact on food security.
- Strong and efficient insurance sector. By using the same insurance products in a coordinated way, rather than duplicating, PADAER and R4 optimize investment and strengthen the capacities of delivery channels.
- Graduation. Once R4 farmers – the most vulnerable and least organized – manage to become more productive as a result of the support of the four R4 pillars, they could graduate into farmers’ organizations partnering with PADAER.
- Knowledge-sharing. R4 shared index insurance lessons and tools with PADAER. In return, PADAER can eventually help R4 farmers improve their productivity by using their training material and processes.
- Increased ownership and capacity. PADAER staff and implementation partners have been trained in index insurance, increasing their understanding of the topic and their capacity to perform some of the targeting and management tasks. This is a good investment because it will facilitate future scaling up.

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