Making climate risk insurance available to small-scale producers

IFAD’s INSURED programme has been supporting work to make agricultural and climate risk insurance accessible to small-scale producers in Indonesia since 2019, with a focus on the coffee and cocoa value chains.

As a demand-driven technical assistance programme, INSURED has been working through the IFAD-financed UPLANDS project (Development of Integrated Farming Systems in Upland Areas), which is implemented by the Government of Indonesia.

Work has been carried out in close partnership with the Ministry of Agriculture and the Ministry of National Development Planning (BAPPENAS).

The importance of agricultural and climate risk insurance

Agricultural insurance is a priority for the Government of Indonesia, which is focused on strengthening farmers’ resilience in the face of natural disasters and the effects of the climate crisis.

The Government is putting in place the pillars of their robust Disaster Risk Financing strategy and insurance is an important building block. INSURED’s technical partner on the ground is Blue Marble Microinsurance, together with the Directorate General of Agriculture Infrastructures and Facilities from the Ministry of Agriculture of Indonesia.

The country’s agricultural sector plays a vital role in the economy and in poverty reduction. Agriculture is the main source of income for one third of the population and 64 per cent of poor people. Despite the efforts of the Government, insurance penetration remains low in rural areas. The Ministry of Agriculture is focused on offering a more diverse agricultural insurance portfolio and INSURED’s support is expected to increase their capacity to do this.
INSURED’s work in Indonesia began in 2019, with a country assessment in relation to agricultural and climate risk insurance carried out in partnership with the International Labour Organization’s Index Insurance Facility (ILO-IIF).

This included a Client Value Assessment of the national rice insurance scheme (Asuransi Usaha Tani Padi – AUTP) offered by Jasindo. The assessment proposed some specific adjustments to improve the value to clients. Results were shared at a workshop held in November 2021.

At the request of the Government, the country assessment was followed by a targeted insurance feasibility study on the coffee and shallot value chains. Another national workshop was held in October 2022 to continue dialogue with the Government and other stakeholders.

Following discussions, Blue Marble proceeded to develop a parametric insurance product for coffee and cocoa.

In line with INSURED’s focus on value for clients, farmers’ feedback has been sought at regular intervals during the work in Indonesia and the results have been integrated in planning and product development.

Focus group discussions were held with cocoa farmers in Southeast Sulawesi and coffee farmers in Banjarnegara to validate the parametric insurance prototype.

WHAT IS PARAMETRIC INSURANCE?

Parametric or index insurance offers an important opportunity for the agricultural insurance market in Indonesia. Unlike traditional indemnity insurance, parametric insurance does not require individual loss assessments for each farm.

Payouts are calculated using satellite-based weather data, which reduces costs and administrative burdens.

Claims paid through parametric insurance products are therefore paid out without the need for individual documentation and more quickly. This can build trust and positive experiences of insurance among small-scale farmers, many of whom have no previous experience of insurance.

The newly designed product will be an important demonstration case of the value and advantages of parametric insurance for the Indonesian government, and for insurers, farmers and other stakeholders.

How does the new product work?

The new parametric insurance product designed and proposed by Blue Marble will protect small-scale coffee and cocoa producers against excess rainfall and drought, with optional add-ons.

The insurance will cover farmers’ production costs of approximately IDR 10 million (USD 675) per hectare.

It is designed to generate frequent, small payouts, which will build trust with farmers.

The expected claims ratio is 70 per cent. Claims will be based on pre-established parameters using satellite-based data. Payouts will be automatic with no exclusions applied and there will be no need for farmers to submit claims paperwork. The product design has been validated in consultation with farmers’ representatives in Central Java and Southeast Sulawesi.

HOW IMPORTANT ARE COFFEE AND COCOA IN INDONESIA AND HOW ARE THEY GROWN?

Coffee and cocoa are key crops for Indonesia’s economy and for the livelihoods of small-scale producers. Coffee represents over 16 per cent of the country’s GDP and is the main source of income for 1.9 million households. Cocoa contributes 3.2% of the country’s GDP and is grown on over 1.5 million hectares of plantations. Indonesia is among the top 10 cocoa producers in the world and the largest in Asia.

Women contribute significantly to both value chains. They play a central role in coffee cultivation and commercialization, making up an important part of the labour force. In North Sumatra, for example, 80 per cent of coffee workers are women. Cocoa off-takers recognize women’s key role in ensuring the sustainability and quality of production in the cocoa value chain.

Coffee and cocoa are cultivated in similar ways. They are both tree crops with similar growth, processing and harvesting calendars, with similar needs and threatened by similar risks. This made it possible to design one insurance product for both crops. Both coffee and cocoa are also being increasingly affected by climate change. As a result, farmers are switching to other commodities and the production of these important crops is falling steadily. They are among the nine commodities identified by the Government as priority consumption and export commodities, for which subsidized seeds and fertilizers are provided.
THE NEW PARAMETRIC INSURANCE PRODUCT

1. CHOOSE THE BASIC COVER

<table>
<thead>
<tr>
<th>Crop calendar</th>
<th>Perils</th>
<th>Premium*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main harvest</td>
<td>Excess rainfall (all phases)</td>
<td>10%</td>
</tr>
<tr>
<td></td>
<td>Drought (all phases)</td>
<td>10%</td>
</tr>
</tbody>
</table>

2. CHOOSE THE ADD-ONS (OPTIONAL)

<table>
<thead>
<tr>
<th>Crop calendar</th>
<th>Add-ons</th>
<th>Premium*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main/Minor harvest</td>
<td>Additional drought cover for 1 phase</td>
<td>++5%</td>
</tr>
<tr>
<td></td>
<td>Additional drought cover for 2 phases</td>
<td>++10%</td>
</tr>
<tr>
<td></td>
<td>Additional excess rainfall cover for 1 phase</td>
<td>++5%</td>
</tr>
<tr>
<td></td>
<td>Additional excess rainfall cover for 2 phases</td>
<td>++10%</td>
</tr>
</tbody>
</table>

* % of production costs

Next steps

The product design has been fully developed by Blue Marble and arrangements with the primary insurer and a panel of reinsurers are being formalized. The goal is to integrate the insurance scheme within the support provided to producers in the value chains — including promoting access to finance, inputs and technical assistance.

Preparations are underway for a first-year pilot programme, including obtaining regulatory approval, training for key stakeholders, set-up of technology and the development of a marketing campaign.

During the pilot year, efforts will also be devoted to securing further partners and funding, in order to scale up the product from the second year.
TAKEAWAYS

1. Parametric insurance is an important opportunity for the Indonesian agricultural and climate risk insurance market.

2. It is well suited to countries like Indonesia, with its vast geographical spread and 17,000 islands.

3. Where traditional indemnity insurance is cumbersome and costly to execute particularly in rural areas, parametric insurance offers a more efficient solution by leveraging satellite data that can cover any location, thus offering greater reach and scalability.

4. A parametric, crop-agnostic drought and excess rain cover is both feasible and scalable.

5. Smart subsidies or an alternative form of premium financing are vital to ensure initial take-up.

6. The agreement of all stakeholders should be secured before launching a scheme.

7. Capacity-building is important for all project partners to understand not only the benefits, but also the limitations of such an insurance product.

8. Trust must be built with farmers through transparency, straightforward processes and face-to-face interaction.

9. Women’s agricultural tasks, constraints and preferences must be taken into account when designing both risk-management and production-boosting activities for farmers.

10. A focus on women’s insurance needs is strategic for social and commercial reasons.

WHAT IS INSURED?

INSURED is a US$6 million programme that was established in 2018. It is generously funded by Sida – the Swedish International Development Cooperation Agency. The programme is implemented by IFAD through PARM – the multi-donor Platform for Agricultural Risk Management. The first phase of INSURED is operational from 2018 to 2023.

INSURED aims to integrate insurance in development activities in order to de-risk agricultural investments and protect small-scale producers’ incomes. The programme’s goal is to strengthen the livelihoods of poor rural households by increasing their resilience and capacity to manage climate risks. INSURED supports multi-step interventions to make insurance accessible to small-scale producers. These include policy and country-level technical assistance on agricultural and climate risk insurance, detailed feasibility studies, and dedicated technical assistance during project design and implementation. INSURED promotes insurance as one tool integrated within a holistic approach to climate risk management; it is not a magic bullet.