CASE STUDY

Café Seguro: Climate Protection for Smallholder Farmers

InsuResilience Solutions Fund

2026

InsuResilience
Solutions Fund

OVERVIEW

OBJECTIVE

The project objective is to strengthen the climate resilience of smallholder coffee farmers and their families in rural Colombia. To achieve this, the Project Partners successfully advanced the pilot of the index insurance Café Seguro to a larger scale, delivered through cooperatives in the form of group policies. The product provides protection against drought and excessive rainfall – the two main climate risks affecting coffee production in the country. By safeguarding farmers' incomes, the project also contributes to securing employment and supporting the stability of Colombia's second most important export commodity.

PROJECT CHARACTERISTICS

Target group
Smallholder coffee farmers

Target region
Caldas, Antioquia, Huila, Cauca, and Nariño

Insured asset
Agricultural production costs

Insured peril / hazard
Drought, extreme rainfall

Insurance type
Meso-scheme with aggregators / cooperatives as policyholders

Partnership
Blue Marble Micro Limited, InsurTech
Caféxport, Coffee intermediary supporting cooperatives
Seguros Bolivar, local insurance company
Varios local cooperatives

Project timeline
October 2022 – March 2026

OUTCOMES

- Beginning of 2025, a total of 23,488 coffee farmers were insured of whom 30% were female producers. With an average household size of five individuals, this translates to around 117,000 beneficiaries, surpassing the original target of 100,000 beneficiaries.
- Staff of 10 aggregators / cooperatives have been trained on Café Seguro´s technical design and enrolment process during a series of workshops. Each training was tailored to the specific needs of each client, using real-life examples of Café Seguro cases.
- By the end of 2025, customised weather indexes were developed and priced for 20 aggregators / cooperatives. These indexes were tailored to local microclimates and crop calendars and significantly reduced basis risk and improved product relevance.
- The project launched a series of awareness raising campaigns including digital educational material for more than 8,500 farmers. These proved especially effective for those with limited prior knowledge of insurance, boosting trust, understanding, and renewal rates.

InsuResilience
Solutions Fund

PROJECT SUMMARY

Coffee production is central to Colombia's economy and culture, yet smallholder farmers face increasing risks from climate variability. Extreme rainfall, drought, and recurring phenomena such as La Niña and El Niño undermine yields, threaten incomes, and weaken community resilience.

To address these challenges, Café Seguro was designed and launched in 2018 by the InsurTech Blue Marble, the local insurance company Seguros Bolívar, and Caféxport, a local coffee intermediary. The index-based insurance product uses satellite rainfall data to cover two of the most damaging risks in coffee production: excess rainfall during flowering and drought during grain filling and harvest. Policies are issued to cooperatives, which combine government premium subsidies with their own resources and, where available, Fairtrade resources to make coverage affordable for their members. The product triggers automatic payouts when satellite data confirms drought or excess rainfall, eliminating the need for farmers to file claims or for on-site loss assessments.

With support from the InsuResilience Solutions Fund (ISF), the project entered a scale-up phase to expand coverage to additional regions such as Huila, Cauca, and Nariño. A pipeline of cooperatives and aggregators was built, while Seguros Bolívar's sales force mobilised outreach with the goal to integrate risk transfer into broader resilience strategies of Colombia´s coffee sector.

The affordability of coverage through subsidies enabled early adoption and learning, allowing farmers and cooperatives to experience the value of climate risk protection for the first time. In 2024, the onset of El Niño brought extreme drought conditions. The insurance solution responded with indemnities almost four times higher than those linked to rainfall events the previous year, cushioning farmers from devastating income losses. At the same time, new weather indexes tailored to local microclimates and crop calendars were introduced, further improving product relevance.

The project has also increasingly focused on farmer engagement and awareness, launching a personalised communication campaign for farmers and integrating a sustainable agriculture training course for policyholders and farmers to link risk transfer with broader climate adaptation and resilience practices.

By combining access to parametric insurance, cooperative networks, and financial literacy, Café Seguro strengthens the resilience of Colombia's coffee farmers. It provides timely liquidity, reduces reliance on negative coping strategies, and enables reinvestment in sustainable production.

Looking ahead, maintaining affordable access through stable subsidy mechanisms and embedding insurance within broader sustainability programmes will be critical to securing long-term impact for Colombia's coffee regions.

PROJECT STRUCTURE

ISF PROJECT PARTNERS

Caféxport	Seguros Bolívar	Blue Marble	Local Coffee Cooperatives	LOCAL partners.
• Local Coffee Intermediary • Managing technical and agronomic support to cooperatives	• Local insurance company • Risk taker • Distribution through sales force	• Project Lead • InsurTech • Product and IT development	• Direct access to beneficiaries	• Local Farmers' Support Organisation

InsuResilience
Solutions Fund

KEY TAKEAWAYS

- **Involving cooperatives and farmers in product design** not only builds trust but also deepens product understanding and increases long-term retention — far more effective than top-down awareness campaigns.
- **Customisation of indexes** to local microclimates and crop calendars, supported by high-resolution satellite data reduces basis risk and increases farmers' confidence in the product's reliability as evidenced qualitatively by back-testing aligned with reported loss years.
- **Targeted education campaigns** using especially videos and presentations via WhatsApp and in-person visits proved most effective. These tools help farmers — including those with little prior insurance knowledge — understand Café Seguro, its benefits, and payout mechanisms.
- **Premium subsidies have been central** to the programme's success to ensure the affordability of the insurance product **helping farmers to access protection** for the first time.
- **Multiple payout options**, such as mobile wallets, bank accounts, or the cédula cafetera[1], improve accessibility and reduces delays or misuse.
- **Cooperatives remain the backbone of distribution** but have limited reach; future growth will depend on strategic partnerships with banks and commercial actors offering bundled insurance products.
- **Payout times improved**, with most farmers receiving funds **through digital channels**. However, limited financial inclusion in rural areas remains a barrier, highlighting the importance of expanding digital payment access.
- **Continuous engagement** with farmers and cooperative managers as well as **payout events** have proven critical for fostering lasting confidence in the programme.

[1] Bank account exclusive for coffee farmers

InsuResilience
Solutions Fund

LESSONS LEARNED

BASIS RISK

- **Tailoring insurance** to specific microclimates and phenological calendars enhances relevance and satisfaction, while reducing basis risk. By the end of 2024, 17 customised weather indexes for 17 aggregators / cooperatives were created and priced with existing peril (rainfall), exceeding initial expectations. For 2025, insurance solutions were designed to reach 20 aggregators / cooperatives.
- Using **satellite data with high pixel density** - from a 625 km² grid (25x25 km) to a 5 km² grid - improved capturing microclimatic variations and the accuracy of rainfall measurements while also geographical basis risk has been reduced, ensuring the product better reflects local conditions.
- **Open communication with farmers** about the concept of basis risk helps manage expectations and increases confidence in the insurance product and its payout mechanisms.

WILLINGNESS TO PAY

- The **participatory co-design of Café Seguro, local adaptation of distribution models** as well as **intensive workshops** with coffee growers, has sustained the willingness to pay across regions. The premium accounts for 1-10% of the average income of the beneficiaries after deducting subsidies.
- Based on interviews, field observations, and commercial visits with aggregators such as cooperatives and producer organisations, pilot results showed that cooperatives and farmers would **continue purchasing insurance even without government support**, though with smaller coverage levels, recognising its importance in protecting against severe climatic events.
- **Regional differences in maturity**: In long-standing programme areas (over seven years), willingness to pay is particularly strong, while newly reached regions still require continuous education and awareness-building efforts. Retention rates remain consistently high across project years, ranging over 75%, reflecting sustained interest from cooperatives.

CLIENT VALUE

- **Co-designing products** with cooperatives and farmers builds trust, improves understanding, and increases uptake and retention rates. Farmers gain literacy about how the product works through active involvement, which is more effective than top-down awareness campaigns.
- A **detailed communication plan** combined in-person workshops, SMS alerts, and a video series shared via WhatsApp explaining parametric insurance in a practical way. According to field experience and direct feedback from coffee producers and technical personnel, these tailored materials proved most effective in building trust, clarifying complex insurance concepts and encouraging early adoption.
- **Payout processing time has improved with new payment channels** selected by farmers, with most farmers receiving payouts promptly through bank accounts or mobile wallets. The average payout processing time is 45 days. Farmers using digital payment channels access their funds almost instantly after processing, whereas those in remote areas have experienced delays in collecting their compensation in person.
- A **large share of the target population remains unbanked**. Many clients who opted for cash collection at bank branches have not withdrawn their payments, underscoring the need to further promote financial inclusion and digital payment options.

InsuResilience
Solutions Fund

TECHNOLOGY / DIGITALISATION FOR INSURANCE PROCESS

- Investment in **digital systems and Application Programming Interfaces (APIs)** streamlines the subscription/enrolment process and reduces administrative burdens for both cooperatives and insurers.
- Offering farmers multiple **payout and payment options** — via mobile wallets, traditional bank accounts, or the specialised cédula cafetera — enhances accessibility and reduces risks of misuse or delays.
- Mobile money platforms[2] and digital tracking tools strengthen **transparency in payout distribution** and help monitor how payments reach recipients.
- However, **ecosystem constraints** such as varying levels of digital infrastructure, limited payment options in remote rural areas, and the gradual adoption of mobile wallet solutions occasionally affect process timelines.

DISTRIBUTION CHANNELS

- **Cooperatives and farmer associations remain the most effective distribution model,** acting as aggregators that provide on-farm support and training, and enabling agile decision-making. However, nationwide scale-up is constrained by the low level of producer organisation, as a large share of smallholder coffee farmers are not affiliated with cooperatives or producer associations.
- **Administrative efficiency in collective payment handling** was tested and refined as some cooperatives preferred individual payments. This led to the exploration of alternative mechanisms, such as deducting premiums from coffee sales, linking coverage to loans, or offering insurance as loyalty incentives, which highlighted the advantages of embedding insurance within existing financial services and underscored the importance of strategic partnerships with banks for administrative efficiency, scalability and long-term sustainability.
- **Field presence remains essential** as workshops with agronomists, cooperative managers, farmers, and their families significantly improved understanding and boosted renewal rates (current retention rate at 78%).

CONSUMER PROTECTION

- Awareness campaigns, detailed group sessions, and workshops with farmers and cooperative managers were carried out before renewals and during payout events, **ensuring beneficiaries clearly understood** their insurance coverage.
- **Moments of payout are key to raising awareness,** improving understanding of the insurance concept, and strengthening beneficiaries' trust in the product and its partners. By the end of 2025, more than two thirds of insured farmers had received indemnity payments following extreme climatic events, demonstrating the responsiveness and reliability of the insurance mechanism.
- **Sales commissions are capped** to encourage responsible selling, while beneficiaries receive payouts automatically without having to file a claim, ensuring fairness, simplicity, and timely compensation.

[2] Provided by Fondo para el financiamiento del sector agropecuario (Finagro)

InsuResilience
Solutions Fund

OUTLOOK

The project is moving into a new phase focused on strategic expansion and sustainability. A key priority will be to extend coverage to new coffee-growing regions where farmers still lack access to climate risk insurance. Efforts will emphasise financial education, enabling farmers to understand the value of protection and manage their resources more effectively.

Over the next three to five years, the project aims to reach 100,000 insured farmers, scale up through new distribution models, and bundle insurance with credit and agricultural inputs in collaboration with key sector stakeholders. Partnering with banks as new distribution channels will help expand outreach, enhance financial inclusion, and gradually reduce reliance on premium subsidies.

© Idalba Franco

www.insuresilience-solutions-fund.org

InsuResilience Solutions Fund

funded by KFW

on behalf of Federal Ministry for Economic Cooperation and Development

managed by Frankfurt School of Finance & Management

Licensing and Reuse Disclaimer

This document is made available under the terms of the Creative Commons Attribution 4.0 International License (CC BY 4.0). Under the conditions of this license, any individual or entity is permitted to copy, distribute, transmit, and adapt the content of this document, in whole or in part, and in any medium or format, for any purpose, including commercial use. Such use is permitted provided that appropriate credit is given to the original author(s) and source, a link to the license is included, and any modifications made to the original content are clearly indicated.

While reasonable efforts have been made to ensure the accuracy and reliability of the information presented in this document at the time of publication, the licensor does not warrant that the content is free from errors or omissions. The information is provided "as is" and may be subject to change without notice.

The licensor shall not be held liable for any direct or indirect loss or damage arising from the use of the material. Users are solely responsible for ensuring that their use of the content complies with the applicable license terms and does not infringe any rights of third parties, including but not limited to intellectual property rights.

The full legal text of the license is available at: https://creativecommons.org/licenses/by/4.0/legalcode