

Tripartite Agreement Programme Case Study

Developing Agricultural Resilience in Ecuador

The Tripartite Agreement Programme

The Tripartite Agreement is a public-private partnership between the United Nations Development Programme (UNDP), the German Federal Ministry for Economic Cooperation and Development (BMZ) and the Insurance Development Forum (IDF) to strengthen insurance markets, enhance governments' institutional risk management capacity and develop innovative risk financing solutions to help developing countries and communities become more financially resilient to climate risks. The programme is underpinned by up to US\$5 billion in risk capacity committed by IDF insurance industry members. Risk financing products are co-developed by governments and IDF member insurers, with support from UNDP. Each country project is co-financed by BMZ through the InsuResilience Solutions Fund (ISF) and IDF insurance industry members. Beyond supporting product development, UNDP provides capacity-building and technical assistance and supports policy and regulatory reforms to embed risk finance into national systems, with funding from BMZ.

The United Nations Development Programme (UNDP)

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The Insurance Development Forum

A unique public-private partnership, the Insurance Development Forum (IDF) helps close protection gaps so that people, businesses and nations can recover faster from disaster, attract investment and thrive. Led by industry and co-chaired by the United Nations Development Programme (UNDP) and the World Bank Group, the IDF aligns insurance expertise with public policy and development priorities to drive resilience. It brings together change agents from across sectors to help build future-ready nations. For more information, visit: www.insdevforum.org

The InsuResilience Solutions Fund

The InsuResilience Solutions Fund (ISF) aims to support innovative solutions that help mitigate the negative impacts of climate change. Managed by Frankfurt School of Finance & Management and financed by KfW Development Bank on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ), the ISF works to close the protection gap by targeting vulnerable populations disproportionately affected by climate risks. To achieve this, ISF fosters the development of needs-based, financially sustainable climate risk insurance products in developing and emerging countries.

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Case study at a glance

Focus of solution

Agricultural parametric insurance for smallholder maize¹ and rice farmers to protect them against drought and excess rainfall

Industry partners (IDF members)

Guy Carpenter México Intermediario de Reaseguro S.A de C.V, AXA Climate, and Blue Marble Microinsurance

Local insurers

Hispana de Seguros y Reaseguros

Local partners

Ministry of Agriculture, Livestock and Fisheries (MAGP)², through the Campo Seguro project now called Agroprotege³, Financial and Monetary Policy and Regulation Board (JPRFM), Superintendency of Companies, Securities and Insurance (SCVS), National Institute of Meteorology and Hydrology (INAMHI)

Beneficiaries

Up to 10,000 people (2,511 smallholder rice and maize farming households) across 4 provinces (Guayas, Los Ríos, Manabí, Loja) and 21 cantons in the first cycle of the pilot project

Coverage

Excess rainfall (rice) and drought risk (maize)

Premium financing

100 percent supported by InsuResilience Solutions Fund (ISF) for the first year

Status

The policy was approved in December 2025 by the Insurance Supervisor and the pilot program started on January 1, 2026

Policy/regulatory links

Reform of the Organic Monetary and Financial Code (Ley Orgánica Reformativa del Código Orgánico Monetario y Financiero); Microinsurance Regulation (Norma de Microseguros); Approval of the general conditions of the insurance policy by the Ecuadorian regulator, Superintendencia de Compañías, Valores y Seguros (SCVS)

1 Hard yellow maize

2 Signed the project grant agreement

3 Proyecto para el impulso productivo sostenible, mediante el aseguramiento agropecuario (Agroprotege)

About the Tripartite Agreement Programme

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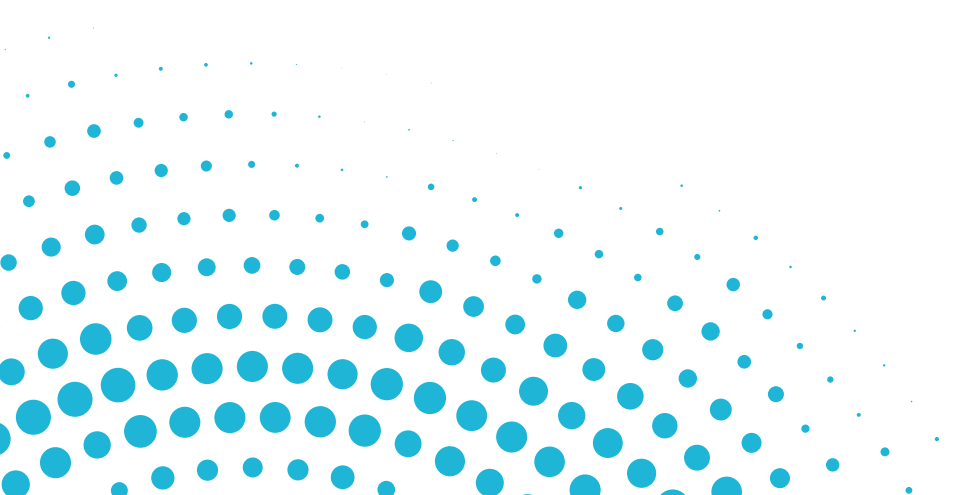
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Defining the Ecuador project focus: Mapping the landscape and engaging key stakeholders

To better understand Ecuador's risk landscape and identify the focus of the Tripartite project, UNDP conducted an insurance and risk financing diagnostic and led a national consultation process including key institutions such as Financial and Monetary Policy and Regulation Board (JPRFM), Superintendency of Companies, Securities and Insurance (SCVS), National Assembly of Ecuador, Ministry of Agriculture, Livestock and Fisheries (MAGP), Ministry of Economy and Finance (MEF), National Institute of Meteorology and Hydrology (INAMHI) and Ecuadorian Federation of Insurance Companies (FEDESEG). A summary of Ecuador's insurance and risk landscape is captured in Box 1 below.

The process revealed that Ecuador's agricultural sector is increasingly exposed to floods, storms and El Niño-induced extreme weather events. Earthquakes constitute the costliest hazards, with potential losses projected up to \$30.6 billion, while floods remain the most frequent. These natural hazards threaten rural communities, household food security and the livelihoods of smallholder farmers who depend heavily on maize and rice for both consumption and income.

Building on this national scoping, the project stakeholders agreed to focus the project on addressing agricultural risks for smallholder maize and rice farmers, where the Campo Seguro project (now Agroprotege) has not yet achieved a significant percentage of coverage.



Snapshot of Ecuador's insurance and risk landscape

Ecuador is classified as a “very high risk” country, with exposure to earthquakes, volcanic eruptions, landslides and recurrent hydrometeorological events such as El Niño and La Niña. Despite high vulnerability among smallholder farmers, who make up most of the agricultural sector, the country relies primarily on ex-post disaster financing and international loans. Insurance penetration is low at 1.8 percent, and microinsurance covers only about 2 percent of low- and middle-income populations.

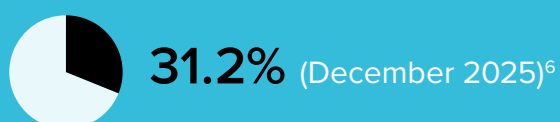
Main natural hazards

Earthquake, volcanic eruptions, flood, drought⁴

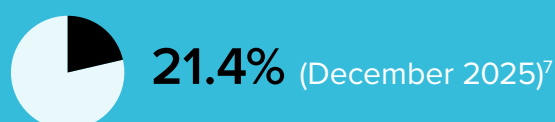
Insurance penetration



% workforce engaged in agriculture



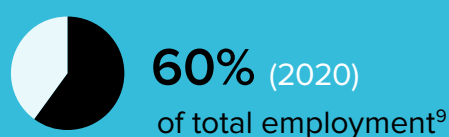
Multidimensional poverty



Number of insurance providers

27 insurance companies were active in the insurance sector in Ecuador in 2025 (not including prepaid medicine companies)⁸

Small business % contribution to workforce



4 Bündnis Entwicklung Hilft and IFHV, WorldRiskReport 2023 (Berlin, 2023). Available at <https://reliefweb.int/report/world/worldriskreport-2023-disaster-risk-and-diversity>.

5 Patricio Salas, "The Insurance Sector Grew 5.7% and Seeks to Reduce the Protection Gap in Ecuador," Ekos Negocios (Quito, June 2026). Available at: <https://ekosnegocios.com/articulo/el-sector-asegurador-crecio-5-7-y-busca-reducir-la-brecha-de-proteccion-en-ecuador>.

6 National Institute of Statistics and Censuses (INEC), "National Survey of Employment, Unemployment and Underemployment (ENEMDU): Labour Market Indicators, Q3 2025," (Quito, 2025). Available at: https://www.ecuadorencifras.gob.ec/documentos/web-inec/EMPLEO/2025/Trimestre_III/2025_III_Trimestre_Mercado_Laboral.pdf.

7 National Institute of Statistics and Censuses (INEC), "National Survey of Employment, Unemployment and Underemployment (ENEMDU): Poverty and Inequality Indicators, December 2025," (Quito, 2025). Available at: https://www.ecuadorencifras.gob.ec/documentos/web-inec/POBREZA/2025/Diciembre/202512_PobrezayDesigualdad.pdf.

8 Superintendency of Companies, Securities and Insurance (SCVS), "Insurance Institutions Registry," (Quito, 2025).

9 World Bank Group, "Ecuador: Micro, Small and Medium Enterprises," (Washington, D.C., 2020). Available at: <https://www.worldbank.org/en/news/press-release/2020/07/01/ecuador-micro-pequenas-medianas-empresas>.

Project focus: **Protecting Ecuador's smallholder farmers from climate-related hazards**

Agricultural risks in Ecuador

- Ecuador is highly exposed to natural hazards, such as floods, excess rains, and landslides, particularly in coastal and low-lying agricultural provinces such as Guayas, Manabí, and Los Ríos, where maize and rice production is concentrated.
- Floods are the most recurrent hazard, periodically damaging crops, inundating fields, and disrupting rural transport, causing significant income losses for smallholder farmers. In 2025, floods caused crop losses of more than \$15 million, with rice being the most affected crop, with more than \$9 million in losses.¹
- Climate phenomena such as El Niño and La Niña exacerbate this exposure, triggering excess rainfall, droughts, and landslides that disrupt agricultural production cycles. Between 1987 and 2016, these events caused roughly \$4.4 billion in national losses, with major impacts on crops, soil, and infrastructure.²
- Landslides directly threaten rural livelihoods by destroying cropland, blocking farm-to-market access, and isolating communities, highlighting the persistent vulnerability of smallholders dependent on continuous seasonal production.

Overview of proposed intervention and partners

To protect the country's smallholder maize and rice farmers from climate-related risks, the Tripartite Project team committed to developing Ecuador's first parametric agricultural insurance solution to provide direct, affordable coverage for the most vulnerable farmers, complemented by institutional capacity-building and policy and governance frameworks to facilitate local ownership and long-term sustainability. Unlike traditional insurance products, which are based on actual damage or loss and require validation from a claims adjuster, parametric products are based on pre-determined triggers, such as rainfall or wind speed, leading to faster payouts, sometimes even before disaster strikes. The project also laid the groundwork for broader climate-smart agricultural practices and financial inclusion strategies.

The project was co-led by the Ecuadorian Government, UNDP and IDF, with financial support from BMZ for UNDP, and product design co-financed by the IDF participating members and the ISF. A consortium of international and local insurers convened by the IDF was responsible for the product design. In addition, ISF provided 100 percent of the premium financing for the first year that the insurance product was placed in the market.

¹ Ministry of Agriculture, Livestock and Fisheries (MAGP), Matrix of Impact on Productive Areas due to the presence of Adverse Events (MAAPEA PLUS), (Quito, 2026)

² Ecuador Collective with Risk Management, (Guayaquil, 2018).

Implementing the Tripartite solution

The Tripartite approach blends insurance product development by IDF and institutional capacity building and insurance market development from UNDP to ensure long-term sustainability.

Designing the parametric crop insurance product

The parametric insurance solution, designed by the project consortium of IDF member and local insurers to respond to the government's requirements, is the first policy of its kind to be used in the country. It provides coverage for excess rainfall affecting rice crops and for drought affecting maize. It is designed to deliver rapid liquidity to small producers after severe events that can cause significant damage to crops and threaten the livelihoods of farming families.

Trigger mechanism

Rice: For the risk of excess rainfall, the index is defined as the maximum value of the accumulated sum of daily precipitation over a period of thirty-one (31) consecutive days. This calculation is based on daily precipitation data (in mm) from the Climate Hazards Group InfraRed Precipitation with Stations (CHIRPS), provided by the Climate Hazards Center at the University of California, Santa Barbara.

Maize: For drought risk, the index is calculated based on the sum of soil moisture recorded during the risk period. This calculation uses ERA5-Land reanalysis data from the European Centre for Medium-Range Weather Forecasts (ECMWF), headquartered in Shinfield Park, Reading, RG2 9AX, United Kingdom.

Coverage

When an excess rainfall or drought event reaches or exceeds the pre-established threshold for any of the 21 cantons where the pilot is being conducted, the policy triggers a payout of up to \$600 per small producer, to support their recovery. The cantons were selected based on two criteria: 1) a high number of small producers with less than 5 hectares, and 2) significant vulnerability to flooding and drought. Official sources were used for the selection of cantons for the pilot, and the criteria were validated with the Ministry of Agriculture, Livestock and Fisheries (MAGP).

This is carried out according to the payment structure outlined below:

TABLE 1
Payment structure for risk of excess rainfall, rice.

INDEX higher than	INDEX lower than or equal to	Compensation	USD
—	FIRST THRESHOLD	0%	0
FIRST THRESHOLD	SECOND THRESHOLD	20%	120
SECOND THRESHOLD	THIRD THRESHOLD	50%	300
THIRD THRESHOLD	INFINITY	100%	600



TABLE 2

Payment structure for drought risk, maize.

INDEX higher than	INDEX lower than or equal to	Compensation	USD
FIRST THRESHOLD	INFINITY	0%	0
SECOND THRESHOLD	FIRST THRESHOLD	20%	120
THIRD THRESHOLD	SECOND THRESHOLD	50%	300
INFINITY	THIRD THRESHOLD	100%	600

Population Coverage

Placement of the product has been enabled through premium financing from the ISF for the first coverage period. As a result, 2,511 smallholder rice and yellow maize producers have coverage for the first planting cycle (January - May 2026), of which 44 percent are women, 15 percent are young people up to 29 years old and 75 percent of farmers are accessing insurance for the first time. 400 more rice farmers will have drought coverage for the second cycle in August 2026.

Integration with disaster planning

It is expected that this product will be scaled up and adopted by both the public and private sectors in Ecuador as an adaptation measure, so that it contributes to the country's Nationally Determined Contribution (NDC), supports the goals and indicators of the Agricultural Public Policy 2025–2034, becomes part of the updated National Disaster and Risk Financing Strategy, and aligns with the mandates established in the Organic Law for Comprehensive Disaster Risk Management.

Sustainability and financing

The development of the insurance product was co-financed by the ISF and the IDF industry partners. Also, in its first year, the ISF covered 100 percent of the premium. For the following years, the product is expected to be adopted by the government where they would fund a majority of the premium. UNDP is working with the government to secure the resources to co-finance the parametric insurance policy. The expectation is that in future years, the government will expand parametric coverage to additional crops and regions in Ecuador.

Regulatory approval

UNDP and the IDF consortium in Ecuador enabled the regulatory approval for the parametric insurance product by supporting the reform of the Organic Monetary and Financial Code, and the approval by the SCVS of the general conditions of the insurance policy, both essential steps that enabled its implementation.



Photo: UNDP Ecuador. This farmer is a member of the National Corporation of Rice Producers' Organizations (CORPNOARROZ)

Building institutional capacity and governance

In parallel with the design of the insurance solution by the IDF consortium working with the government, UNDP worked with officials from various State entities and national counterparts to strengthen institutional capacity and establish key policy and governance frameworks. These efforts included strengthening and building capacities for the design and innovation of inclusive insurance and microinsurance; developing knowledge on Solvency II reporting requirements; reinforcing and creating actuarial and risk management capacities; and, together with the IDF insurers' consortium, building capacities in parametric insurance. All of which ensure the local ownership and long-term sustainability of the solution by the country's public and private insurance ecosystem.

Furthermore, to institutionalize the process and ensure the solution would meet the needs of end beneficiaries, the project partners focused on addressing a key challenge: getting insurance payouts to smallholder farmers, many of whom were unbanked. The project team supported unbanked farmers to open bank

accounts for later payment through innovative mechanisms, such as direct cash transfers, to enable beneficiaries to receive the payout from any claims directly into their bank accounts. This approach ensured that the insurance payouts benefited farmers even in remote areas. The IDF consortium and UNDP also established mobile communication channels to deliver climate alerts, prevention messages, and payout information, keeping farmers informed and supported throughout the process, while creating a coherent coordination structure for all technical and policy activities related to the scheme.

UNDP is supporting the MAGP in the establishment of a Technical Committee on Agricultural Insurance. The objective is to strengthen interinstitutional coordination for the formulation, implementation, and execution of public policies, plans, programs, projects, and strategies aimed at enhancing the resilience of small and medium producers through agricultural insurance. This initiative seeks to contribute to food security and to protect investments in the sector.



A major milestone: Placement of the policy

In early 2026, Ecuador formally contracted its first parametric excess rainfall (rice) and drought-risk (maize) insurance policy – a landmark step for climate resilience and the Tripartite Agreement Programme globally.

The insurance policy enables small producers to access funds within a few weeks of catastrophic rains or droughts, reducing their reliance on emergency loans or turning to informal credit.

Juan Carlos Vega, Ecuador's Minister of Agriculture, Livestock and Fisheries, said:

"These parametric insurance policies align with our commitment to provide smallholder farmers with tools that strengthen their sustainability, especially in the face of rising climate change challenges. It is a tool that financially protects them from climate risks and contributes to our country's food sovereignty."

Dr. Katharina Stasch, Director-General for Multilateral Development Policy; Transformation; Climate, German Federal Ministry for Economic Cooperation and Development (BMZ), said:

"As climate risks continue to rise, public-private collaboration between governments, insurance and development partners is more critical than ever. The landmark insurance policies led by the government of Ecuador are an example of how countries can unlock resilience through insurance and risk management, creating a win-win where smallholder farmers are protected, local insurance markets strengthened, and the country's agricultural sector bolstered against risks."

Dr. Nerea Vadillo, AXA Climate Public Sector Technical Lead / IDF Ecuador Project Co-Lead, said:

"Through the Tripartite Agreement Programme, IDF members have helped deliver a solution that protects livelihoods on the ground today, while strengthening Ecuador's long-term financial resilience to climate risk. This is what building future-ready nations looks like: scalable, country-led solutions that enable faster recovery, informed decision-making, and greater resilience for those most exposed to climate shocks."

Marcos Neto, UN Assistant Secretary-General and Director of UNDP's Bureau for Policy and Programme Support (BPPS), said:

"This milestone in Ecuador demonstrates how insurance can be used as a powerful tool for inclusive and climate-resilient development. As countries face rising climate threats, Ecuador's model offers a scalable and sustainable pathway for governments to protect smallholder farmers and their substantial contributions to the economy and food security."

Inka Mattila, UNDP Ecuador Resident Representative, emphasized:

"This insurance not only protects crops, it also protects the dreams and hard work of thousands of rural families who feed the country. We are sowing trust to reap resilience."

Dr. Annette Detken, Head of InsuResilience Solutions Fund (ISF), said:

"This innovative public-private partnership demonstrates how government leadership, industry expertise, and development finance can come together to build scalable solutions for the most vulnerable. With these two pioneering policies now live, financial resources can flow quickly and predictably to farmers when drought and floods strike, helping to safeguard lives and livelihoods."



Results and lessons learned

Early impacts

- **Enhanced resilience** for 2,511 smallholder rice and maize farming households, covering more than 10,000 people, in 21 cantons across 4 provinces that are vulnerable to excess rainfall and drought in the first cycle of coverage.
- **Adapted the regulatory framework** to enable the implementation and commercialization of parametric insurance across all sectors nationwide.
- **Strengthened the institutional capacity** and governance to support the adoption and scaling of parametric insurance products.

Key lessons

- 1 Public–private partnerships are essential:** The UNDP's impartial and convening role helps align political, financial, and technical stakeholders, while the insurance industry contributes critical expertise in risk modeling, product design and capacity building – all in dialogue with government counterparts.
- 2 Institutional preparedness is an indispensable prerequisite for product design:** Strengthening government capacity in disaster risk financing through continuous knowledge transfer is crucial. This requires involving high-level authorities and as many relevant stakeholders as possible from the outset of the project.
- 3 Sustainable premium financing is key** to ensuring long term adoption, continuity, and replicability of the scheme.
- 4 High-quality data and transparency enhance credibility:** Satellite-based and model-based indices must be locally validated and made openly accessible to the relevant government entities.
- 5 Proper sequencing is critical:** Technical design, policy frameworks, regulation, and fiscal preparedness must advance in a coordinated and parallel manner.
- 6 Ensure appropriate trigger calibration:** Correct triggers are critical for parametric payouts, which is why it is important that they are well designed to accurately reflect the risk and enable timely activation of the insurance.

Path to scale

UNDP is supporting the Government of Ecuador in the following areas:

- **Expanding the parametric insurance** model to enable its nationwide adoption for more crops and regions so it can protect a larger number of producers vulnerable to excess rainfall and drought risks;
- **Developing a regulatory framework** to govern the design, operation, and commercialization of parametric insurance in the country;
- **Updating and implementing the National Disaster Risk Financing Strategy**, strengthening the State's capacity to efficiently manage climate and natural risks;
- **Extending parametric insurance solutions for climate risks to other productive sectors**, beyond agriculture;
- **Leveraging climate and disaster risk financing and insurance mechanisms** to inform and strengthen public financial management, including the formulation of national adaptation strategies and broader climate policies; and
- **Refining the insurance payment process** by leveraging digital channels and technologies to enable faster payouts and integrating farmers with banking services.

The development of this parametric insurance product has the potential to demonstrate how coordinated work among multiple public and private sector actors can transform disaster response and establish a sustainable, scalable framework to strengthen climate resilience in Ecuador and beyond.





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