Strengthening Indonesia's Disaster Response with Risk Finance and Insurance

Photo Credit: Shutterstock.com

Region/country	Indonesia
Development partners contributing to the program	Swiss State Secretariat for Economic Affairs (SECO); Global Risk Financing Facility (GRiF) funded by United Kingdom and Germany

Background

Indonesia is one of the most disaster-prone countries in the world. Perched on the Pacific Ring of Fire, it is home to 76 active volcanoes. In recent years, tsunamis have pounded the shores of North Sumatra, Sulawesi, and West Java. Volcanic eruptions, flooding, and landslides, infrequent events in many places, are regular occurrences in Indonesia. In addition to the cost to human life and property, Indonesia has also borne a heavy financial burden in responding to and recovering from natural disasters. According to a recent World Bank analysis, 1.4–1.9 percent of central government expenditures between 2014 and 2018 were for natural disasters—a share that was two to four times more than the government had anticipated.

Indonesia has recognized that it needs to find alternative ways to finance disaster response. During the 2018 Annual Meetings of the World Bank Group and International Monetary Fund in Bali, Indonesia hosted a high-level international dialogue on disaster risk finance and launched its national Disaster Risk Finance and Insurance (DRFI) Strategy.

Operational Scope

The World Bank, with support from the Swiss State Secretariat for Economic Affairs (SECO), has closely partnered with the Indonesian government to develop the DRFI Strategy, and it continues to work with the government on its implementation. In January 2021, the World Bank approved a US$500 million lending operation to support Indonesia's efforts to build and strengthen its financial response to natural disasters, climate risks, and health-related shocks such as the COVID-19 pandemic. The loan supports establishment of a Pooling Fund for Disasters, which was legally created in August 2021 through a Presidential Regulation.

In addition, efforts to build the government's technical capacity in managing funds in order to protect the most vulnerable groups are being co-financed by a US$14 million grant from the Global Risk Financing Facility (GRiF). GRiF, a multi-donor trust fund managed by the World Bank with contributions of US$200 million pledged by Germany and the United Kingdom, helps countries design and implement financial solutions to manage disasters and climate shocks.

Another key component of the World Bank's ongoing collaboration on DRFI with the Ministry of Finance is implementing and scaling up the government's State Asset Insurance Program. Launched in 2019, the State Asset Insurance Program covered over 4,300 buildings of 51 ministries as of September 2021. By the end of 2022, the program should cover buildings of all government ministries, and it could later be scaled up to protect other infrastructure assets.

Work is also underway on integrating Indonesia's efforts into the Southeast Asia Disaster Risk Insurance Facility, an initiative of the members of the Association of Southeast Asian Nations (ASEAN) Plus Three (Japan, China, and Republic of Korea). Indonesia is a member of the facility, which is supported by the World Bank and which has identified financial protection of public assets as a priority product. Similar work is ongoing among neighbors across ASEAN, including in the Philippines and Vietnam.

Activities

The Pooling Fund will serve as a central mechanism that helps ensure an effective and transparent flow of money to relevant government agencies—including faster social assistance payments for victims of disasters—and that improves preparedness planning. Over time, the Pooling Fund will leverage domestic and international insurance and capital markets to increase its financial capacity. The lending operation will also invest in activities to improve planning, such as introducing budget tracking for disaster-related expenditures.

The GRiF grant will finance start-up and operating costs to establish the Pooling Fund as an institution. The grant further supports the technical groundwork needed to identify and develop appropriate risk transfer solutions that can backstop the Pooling Fund.

Indonesia has identified these initiatives as integral to achieving the key objectives of its DRFI Strategy, which are (1) to shield the state budget from unexpected expenditures through a dedicated mechanism for efficiently managing central government disaster expenditures; and (2) to strengthen central government and regional fiscal coordination by establishing clear roles and responsibilities for disaster responses. The DRFI Strategy also aims to protect state assets from destruction by disasters through an indemnity insurance program covering all agencies and ministries, and to protect people from disasters—particularly the poor—through social safety net programs.

Establishing the Southeast Asia Disaster Risk Insurance Facility

Photo credit: Jason Cooper/ Unsplash.

Region/country	East Asia and the Pacific (Cambodia, Indonesia, Lao People's Democratic Republic, Myanmar, the Philippines, Singapore, Japan)
Development partners contributing to the program	Japan, Rockefeller Foundation, United Kingdom, Germany

Background

Developing countries across Southeast Asia are heavily exposed to disaster and climate shocks. Over the past 30 years, these shocks have affected more than 400 million people and their livelihoods as well as critical operations of their economies. These disasters hit the poorest and most vulnerable disproportionately, but these countries still lack institutions and instruments to efficiently manage the rising costs of disaster shocks in the face of increasing climate risks. They rely mostly on contingency budget or delayed budget reallocations after a shock happens—an approach that disrupts planned development—or wait for unpredictable international assistance to support recovery and reconstruction. COVID-19 has further exacerbated the disaster protection gap by depleting the fiscal and financial resources of governments, firms, and households.

Operational Scope and Impact

Over the past five years, an integrated program of financing, technical, and convening support was delivered to members of the Association of Southeast Asian Nations (ASEAN) Plus Three (Japan, China, and Republic of Korea) in order to establish the Southeast Asia Disaster Risk Insurance Facility (SEADRIF) under the SEADRIF support program managed and implemented by the World Bank. The first facility of its kind in Asia, SEADRIF is a pathbreaking initiative that leverages financial markets to provide member countries with technical and financial solutions for better protection against disasters and climate shocks.

The SEADRIF program has provided support to countries both at regional and national levels. At the regional level, assistance was provided to establish SEADRIF institutions, including the SEADRIF governance structure in 2019 and a Singapore-regulated insurance company in 2020; the latter provides member countries with unprecedented access to international reinsurance markets' financial capacity and technical expertise. Upon SEADRIF's full establishment, the SEADRIF Insurance Company (the Company) was capitalized and the whole SEADRIF system operationalized through an Investment Project Financing (IPF) operation approved in October 2020 and complemented by long-standing analytical and advisory services. At the country level, the SEADRIF program has supported components in three International Development Association (IDA)–financed IPF operations; it also provides technical assistance to strengthen national risk financing capacity and improve resilience against external shocks.

Support was provided to the Company for developing its first insurance product, a regional catastrophe risk pool for Lao PDR and Myanmar. The product was launched in early 2021 and reinsured to international financial markets, helping governments safeguard national budgets and protect the lives of their citizens against disaster impacts. Lao PDR became the first country insured by the Company in February 2021. The first product was designed with lessons learned from World Bank trust funded–initiatives in other regions and underpinned by the first regional near-real-time flood monitoring platform and risk model. The platform and risk model combine cutting-edge satellite technology and ground measurements developed in partnership with the European Space Agency and specialized service providers in Europe to enable the market-based catastrophe risk pool, while simultaneously providing governments with rapid, reliable, and relevant data so they can make risk-informed decisions before, during, and in the aftermath of flooding.

In 2020, the SEADRIF program delivered a virtual knowledge-sharing series on financial protection of public assets to teach government officials how to design, develop, deliver, and operate effective financial protection of public assets, particularly through risk transfer and insurance. Initially intended to be an in-person workshop, but then redesigned due to COVID-19, the program delivered 11 interactive webinars and associated fact sheets to over 300 participants from member countries and external partners. This was the first step in preparing a financial solution to protect public assets and a regional capacity-building program. The program also supported SEADRIF's collaboration with Singapore Space and Technology Ltd. in the Humanitarian Assistance and Disaster Relief Challenge Fund in 2020 to further develop relevant satellite technology solutions and innovations.

Tonga Lays the Foundation for a More Financially Resilient Future as the First Pacific Island Country with a Disaster Risk Financing Strategy

Photo credit: Conor Ashleigh/World Bank.

Region/country	Tonga
Development partners contributing to the program	UK, US, Japan, Canada, Germany

Scope

Tonga is a Polynesian Pacific Island Country with a population of 104,000. The Tongan archipelago comprises 169 islands, of which 36 are inhabited. Because of Tonga's location and small size, the country and its population are highly vulnerable to external shocks, including from natural disasters and epidemics, and to climate change and its long-term effects, such as sea-level rise and increasing intensity of tropical storms. Tonga's vulnerability was clearly demonstrated in 2020, when the COVID-19 pandemic and Tropical Cyclone Harold severely affected its economy.

Realizing the risk Tonga is facing, the government has prioritized "a more inclusive, sustainable and effective land administration and environment management, with resilience to climate change and risk" under the Tonga Strategic Development Framework 2015–2025. Building on the existing legal and policy framework for disaster and disaster-related financial risk management, the Cabinet of Tonga recently adopted a Disaster Risk Finance (DRF) Strategy that brings together various ongoing and planned efforts from different sectors to quantify, reduce, and mitigate disaster-related financial risk. This strategy was funded and supported through the Pacific

Catastrophe Risk Assessment and Financing Initiative (PCRAFI) technical assistance program, which aims to increase the financial resilience of Pacific Island Countries against natural hazards and build their capacity to meet post-disaster funding needs.

Activities

Tonga's DRF Strategy provides a framework for coordination between key stakeholders implementing concrete activities with a common objective: to strengthen the financial resilience of the Tongan government, households, and businesses to disasters.

The DRF Strategy identified six strategic priorities for measuring and reducing the economic and financial costs associated with disasters in Tonga:

1. Identify and quantify disaster-related economic and financial risks, including those exacerbated by climate changes.
2. Review the portfolio of risk financing instruments annually to ensure they meet government objectives cost-effectively.
3. Assess options to transfer risk to the private sector and strengthen domestic insurance markets.
4. Strengthen disaster-related public financial management.
5. Develop an adaptive social protection strategy.
6. Develop national disaster risk management policy frameworks and plans and invest in national disaster risk reduction priorities to mitigate and minimize the effect of future disaster shocks, including those exacerbated by climate change.

An implementation plan for the DRF strategy provides a detailed roadmap for how the Government of Tonga will achieve these priorities.

Achievements

In May 2021 the cabinet approved the DRF Strategy, and Tonga became the first country in the Pacific region with a formal strategy for DRF. Since the strategy's approval, the implementation of activities under several priority areas has commenced, including work on building adaptive social protection, risk and exposure identification, and a review of Tonga's National Emergency Fund.

The World Bank will provide technical assistance to support the implementation of the DRF Strategy, working in close collaboration with various ministries in the Government of Tonga. This work is being done through collaboration among several World Bank Global Practices, including Finance, Competitiveness & Innovation (FCI), Macroeconomics, Trade and Investment (MTI), Social Protection and Jobs (SPJ), and Urban, Disaster Risk Management, Resilience and Land (GPURL). There is also an ongoing collaboration with the Asian Development Bank on reforming Tonga's National Emergency Fund.

Building Resilience in the Caribbean: Catastrophe Bond Provides Jamaica US$185 Million in Storm Protection

Photo credit: Mariana Kaipper Ceratti/World Bank.

Region/country	Jamaica
Development partners contributing to the program	UK, Germany, United States Agency for International Development (USAID)

Scope

Jamaica is highly exposed to natural disasters, hurricanes and earthquakes in particular pose a threat to the country's macroeconomic outlook. Natural disasters have cost Jamaica an estimated US$1.2 billion between 2001 and 2010. The damages and losses just from Hurricane Ivan in 2004 exceeded US$350 million. To improve its disaster preparedness, the Government of Jamaica (GoJ) is implementing a strategy that aims to provide "360-degree resilience" to natural disasters.

With support from the World Bank and financing from the United Kingdom, Jamaica created a national public policy on disaster risk financing. This policy aims to improve Jamaica's financial resilience through pre-arranged financing instruments and includes a contingency fund, contingent credit, and catastrophe insurance from the Caribbean Catastrophe Risk Insurance Facility (CCRIF). While these instruments protect Jamaica from smaller, less severe disasters, the country would still experience large financing gaps if severe hurricanes like Hurricane Ivan occurred.

Activities

To address this financing gap, the GoJ entered into an insurance-like risk transfer agreement with the World Bank to quickly receive funds if future storms exceeded pre-defined intensity thresholds. In July 2021, the World Bank issued to capital market investors a catastrophe (cat) bond that provides the GoJ with US$185 million of insurance cover for tropical cyclone events for the 2021, 2022, and 2023 hurricane seasons. With financial support from the Global Risk Financing Facility (GRiF[1]) and the United States Agency for International Development (USAID), the GoJ pays a premium for the cover, which the World Bank then transfers to the cat bond investors. The premium is fixed during the life of the bond, removing uncertainty about the cost. The type of events that will trigger a payout were pre-defined during the structuring of the transaction based on Jamaica's requirements. If a qualifying event occurs, Jamaica will issue a notice to the independent calculation agent (AIR Worldwide), which will determine the payout amount based on the central pressure and track of the cyclone.

Achievements

The GoJ is the first government in the Caribbean region, and the first among all small island states, to independently sponsor a catastrophe bond. This approach is good for Jamaica, since the cat bond transaction generates much-needed financing without raising already-high debt levels; and it is good for investors, since they earn a coupon to compensate them for taking on the catastrophe risk. At maturity any remaining bond principal is returned to investors by the World Bank.

The World Bank is an effective issuer of cat bonds for the benefit of its sovereign members, thanks to its experience and reputation in the capital markets, its AAA credit rating, and its uniquely flexible Capital at Risk Notes program, which facilitates risk transfer solutions using capital markets. The Jamaica bond transaction includes an innovative reporting feature resulting in a quick payout calculation; this allows payouts within weeks of a qualifying named storm and makes assessment of the real losses incurred unnecessary. This feature will facilitate and greatly enhance Jamaica's emergency response.

The GoJ bond is also the first catastrophe bond to use an innovative "cat-in-a grid" parametric trigger design for tropical cyclone risk. This design triggers when a storm (of a certain wind speed or pressure) passes through a pre-defined area or "grid."

Credit rating agencies recognize that a comprehensive disaster risk financing strategy improves fiscal resilience. Fitch Ratings, for example, has noted that the World Bank's issuance of the US$185 million cat bond (representing 1.3 percent of GDP) benefits the Government of Jamaica by significantly strengthening the country's natural disaster risk mitigation strategy.

[1] GRiF is a multi-donor trust fund managed by the World Bank and funded by Germany and the UK that helps countries design and implement financial solutions to manage disasters and climate shocks.

Making Malawi's Social Cash Transfer Program (SCTP) Scalable to Drought with Risk Finance

Photo Credit: Arne Hoel/World Bank

Region/country	Malawi
Development partners contributing to the program	United Kingdom, Germany

Background

Malawi is one of the world's poorest countries: over 50 percent of the population is classified as poor based on the national poverty line (the share is around 70 percent using the US$1.90 per day purchasing power parity (PPP) poverty line), and 80 percent of the labor force is employed in the agriculture sector (mainly smallholder farmers relying on rain-fed agriculture). The country is prone to a variety of weather-related shocks, including frequent flooding and severe drought conditions, which have downstream effects on agricultural outputs and food prices and which impact poor and vulnerable households disproportionately. In the recent severe drought of 2015/16, damages and losses to the economy amounted to US$376 million, or 5.6 percent of GDP. At least 40 percent of the population (6.5 million people) became food insecure; and as the drought drove up food prices, a large part of the population moved into poverty. In response to this vulnerability, the government adopted a National Disaster Risk Financing Strategy in March 2019 to support better financial preparedness.

The strategy provides details on how the Government of Malawi intends to use adaptive social protection to mitigate the impact of disaster shocks.

Operational Scope

In 2019 a US$125 million World Bank lending operation was prepared to improve resilience among Malawi's poor and vulnerable population and strengthen the national platform for safety nets. An additional US$21 million in trust fund financing was accessed from the Global Risk Financing Facility (GRiF) to make safety nets more adaptive and responsive to shocks.

In 2020, the Government of Malawi developed a response to mitigate the adverse impact of COVID-19 on livelihoods, human capital accumulation, and basic consumption for urban poor populations in the four major cities—Lilongwe, Blantyre, Zomba, and Mzuzu. Known as the COVID-19 Urban Cash Intervention (CUCI), this program leverages the ongoing operation and is the first urban-focused shock-responsive cash transfer program in Malawi.

Activities

The Government of Malawi, through its scalable task force (a cross-government committee including the Ministry of Finance), has designed a mechanism to scale up the Social Cash Transfer Program (SCTP) in response to droughts. This mechanism uses a dual-trigger approach, combining a primary trigger based on satellite rainfall data and a secondary trigger that uses data on the ground related to food insecurity and food prices. As of November 2021, the mechanism was covering 75,000 poor and vulnerable households in three districts.

To ensure funding is available, the scalability mechanism will be backed by ex-ante risk financing instruments. In the first year the government will use contingent financing to fund any response. Beginning in the following year, the government will utilize a combination of contingent financing and a risk transfer policy to cover the costs of scaling up the SCTP. In addition, the project is supporting investments in the SCTP delivery systems (Unified Beneficiary Registry, management information system, and digital payments) to increase their flexibility and ensure the funds reach households in a timely manner.

Following the implementation of the CUCI program, the GRiF funded the Malawi COVID-19 Urban Cash Intervention Process Evaluation, which was conducted by the World Bank. This provided a conducive and fertile learning ground for shaping future policy and programming around adaptive social protection.