



case study 01 // 2021

## Derisking Cities with a Parametric Disaster Insurance Scheme

**Republic of the Philippines:  
Disaster Resilience Improvement Program**

**Asian Development Bank**

The Philippines is highly exposed to climate and disaster risk. The impact of disasters is often most devastating in cities since people and economic activities are concentrated here. While city authorities are at the forefront of disaster risk management, they often face funding shortages due to restricted financial flows or lack of budgetary allocation. The Asian Development Bank (ADB) is supporting the introduction of a city-level disaster insurance scheme to increase the ability of city governments to respond quickly and effectively to disasters, through funding support from the Asia-Pacific Climate Finance Fund (ACLiFF).

### Country context

The Philippines is one of the world's most disaster-prone countries, where disasters incur an estimated average annual cost of 0.7% – 1.0% of gross domestic product (GDP). Located along the so-called Pacific Ring of Fire, the country is exposed to the risk of earthquakes and volcanic eruptions, as well as experiencing frequent tropical cyclones (typhoons), floods, landslides and droughts. Approximately 74% of the population is vulnerable to more than one disaster-related hazard.

Disaster risk modelling indicates that the country faces average annual losses of USD 857 million<sup>1</sup> (PHP 43.5 billion) due to earthquakes and USD 2.6 billion (PHP 133.2 billion) due to tropical cyclones. Most notably in 2013, Typhoon Yolanda caused over 6,000 fatalities, affected 16 million people and caused GDP losses of 4.7%. More recently, Typhoon Ompong, the Mindanao earthquakes, Typhoon Tisoy and the Taal volcano eruption have collectively affected about six million people with damage estimated at approximately USD 869 million (PHP 44.13 billion). These events have increased poverty levels in typhoon-prone provinces located along the eastern seaboard. These areas already have poverty rates among the highest in the country. Disasters have also exacerbated gender inequalities, particularly in relation to women and girls<sup>2</sup>. These issues include increased vulnerability to gender-based violence and lack of gender-responsive facilities and products.

### Project description

The [Disaster Resilience Improvement Program](#) (DRIP) supports policy actions by the Government of the Philippines in disaster risk management, as well as providing a source of contingent disaster finance for the timely response to disasters. The ADB loan for the DRIP was approved in September 2020 and the



corresponding ADB technical assistance project will run until June 2024. The policy actions under DRIP will strengthen disaster resilience of Philippine institutions and communities through three areas of reform: i) policy and institutional arrangements for disaster risk management and health-related emergencies, ii) resilience of local government units and physical assets to disaster and climate risks and iii) disaster risk financing. Supported by funding from the Asia-Pacific Climate Finance Fund (ACLiFF), reform area (iii) involves the establishment of a city-level parametric disaster insurance scheme that will be the first of its kind in Southeast Asia, to be launched in 2022.

The use of insurance is expected to improve the fiscal resilience of city governments and narrow the funding gap between available resources and post-disaster response costs, with parametric triggers allowing for rapid payouts. The insurance scheme may be used to support local economic recovery, rehabilitation of evacuation centres and livelihood support. These are important interventions in the immediate aftermath of a disaster. The residents of cities participating in the insurance scheme will indirectly benefit through more timely and effective government disaster response, including the reinstatement of public infrastructure. In line with the InsuResilience Declaration on Gender, the programme will also promote gender equality and empowerment by establishing policies and processes to ensure that gender mainstreaming considerations are adequately addressed in the application of insurance payouts.

Cities will participate in the parametric insurance scheme on a voluntary basis and will fund the insurance premiums from their own budget. This will be available to all 145 Philippine cities starting with the 17 that participated in a previous capacity building and design pilot supported by the ADB. Through further capacity building, an additional 10–20 cities will be recruited each year for three years.

<sup>1</sup> Assuming a USD/PHP exchange rate of 1 PHP/0.0197 USD (15 Oct 2021)

<sup>2</sup> Further information is available here: <https://www.govtech.com/em/disaster/women-disproportionately-affected-by-disaster-experts-say.html>



## Challenges and lessons learned in 2021

The procurement of services in a niche area like disaster insurance requires careful planning and negotiation with internal and external counterparts, particularly given the ADB's extensive procurement procedures that prioritize and safeguard the beneficiaries of its developing member countries. These ensure that the ADB and its financing partner, ACliFF, ultimately deliver on their commitments.

Efficient, coordinated, and effective collaboration between the ADB, government officials and the Government Service Insurance System (GSIS) as the implementing agency has been particularly important due to the pandemic environment and the inability to hold face-to-face meetings. This challenge will be exacerbated once the consulting firm and capacity-building consultants are onboarded. They will then be required to work together with the government and the ADB to roll out an innovative product to cities that may have budget constraints owing to the ongoing pandemic.

"The DRIP has provided immediate budgetary support for the Government's response to the Covid-19 pandemic and natural disasters. It further incorporated disaster risk management into the formulation of the national budget which contributes to the country's financial preparedness for calamities."

**Mark Dennis Y.C. Joven,  
Undersecretary, Department of Finance,  
Philippines**

## City-level parametric disaster insurance

### Hazards covered

Earthquake, Windstorm, Other

### Product/Solution

Contingent Credit, Sub-Sovereign Risk Transfer

### Objective of the project

The overall objective of DRIP is to support the fundamental disaster risk reduction reforms and provide quick-disbursing finance for city-level disaster response in the Philippines.

### Impact and envisaged number of beneficiaries

The city-level parametric disaster insurance scheme is expected to cover at least ten cities in the Philippines, indirectly benefiting approximately nine million people.

### Involved organizations/parties in the project

Philippine Department of Finance (executing agency of DRIP), Government Service Insurance System (implementing agency of insurance scheme), ADB (implementation of the programme, providing DRIP loan), ACliFF (financial support for development and implementation of the insurance scheme).



Anticipation



Relief



Recovery



Reconstruction

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