



The Pacific Disaster Risk Financing and Insurance Program

The *Pacific Disaster Risk Financing and Insurance Program* assists Pacific Island Countries in improving their post-disaster financial response capacity through public financial management and the implementation of market-based sovereign catastrophe risk insurance solutions.

Background

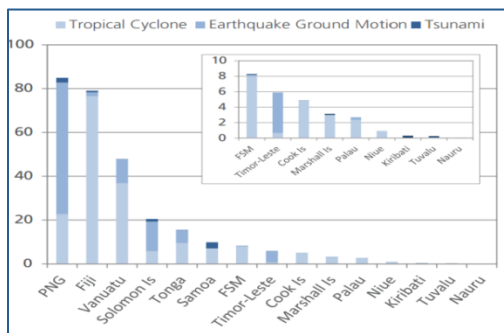
Extreme natural events have affected more than 9.2 million people in the Pacific since 1950 and caused damage of about US\$3.2 billion. From 2012 to 2013 alone, the region experienced several disasters: two severe floods in Fiji, tropical cyclone Evan, a magnitude 8.0 earthquake, and subsequent tsunami in the Solomon Islands (See Figure 1).

Pacific Island Countries (PICs) face critical challenges for financial resilience to disasters. Many PIC Governments have a narrow revenue base, are net importers, and rely on aid as an income stream. This can limit their post-disaster financing options and place constraints on the national budget. Alternatives—such as contingent credit and risk transfers—could be used to reduce the drain on limited public funds.

The Pacific Disaster Risk Financing and Insurance Program (Pacific DRFIP) is a joint initiative of the World Bank Group, the Secretariat of the Pacific Community (SPC/SOPAC) and their partners, with grant funding from the Government of Japan.

The program is an application of the Pacific Catastrophe Risk Assessment and Financing Initiative (PCRAFI) co-financed by the ACP/EU Natural Disaster Risk Reduction Program, the Government of Japan and the Global Facility for Disaster Reduction and Recovery. The Pacific region-wide PCRAFI aims to provide a full spectrum of both financing and physical disaster risk management tools to PICs.

Figure 1. Average Annual Loss (US\$ mm)



Source: PCRAFI country catastrophe risk profile (2012)

Development Objective

The Pacific DRFIP aims to (i) increase the financial resilience of PICs against natural disasters, and (ii) improve their capacity in meeting post-disaster funding needs without compromising their fiscal balance. Access to budget in the aftermath of a disaster is essential to ensure immediate and effective response mechanisms to them. While donor funds will always be required, over-dependency on international relief as a source of post-disaster financing can create delays in the provision of initial relief.

Program Components

The Pacific DRFIP builds on two main components:

- (i) *Pilot implementation of market-based sovereign catastrophe risk insurance solutions.* This component provides participating PICs with insurance coverage against major tropical cyclones and earthquakes/tsunamis ensuring an immediate—yet limited— injection of liquidity following an eligible event.
- (ii) *Technical assistance on public financial management of natural disasters.* This component provides PICs with technical assistance to build capacity in the public financial management of natural disasters, specifically, post-disaster budget mobilization and execution.

Pacific Catastrophe Risk Insurance Solutions

The Pacific Catastrophe Risk Insurance Pilot aims to test the viability of market-based catastrophe risk insurance solutions for PICs. It was launched in January 2013 and initially joined by five PICs—Marshall Islands, Samoa, Solomon Islands, Tonga, and Vanuatu. The Cook Islands became a member during the second season which ran from November 1, 2013 to October 31, 2014.

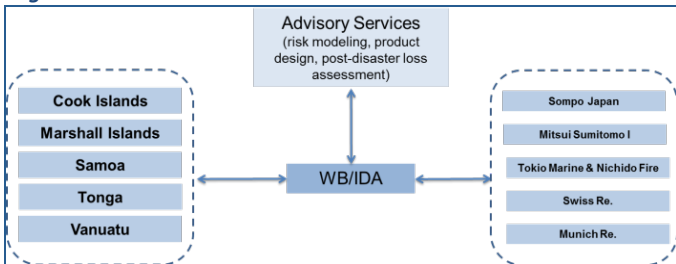
The *Pacific Disaster Risk Financing and Insurance Program* assists Pacific Island Countries in reducing their financial vulnerability to natural disasters. It is a joint initiative of the World Bank Group, the Secretariat of the Pacific Community, and their partners. Grant funding is provided by the Government of Japan.

During the 2014 Forum of Economic Ministers Meeting PICs requested the extension of the pilot for a third year. Following this request, the Government of Japan generously provided premium subsidies to complement country contributions enabling the continuation of the pilot. The third season will run from November 1, 2014 to October 31, 2015 and is comprised of five members—the Marshall Islands, Samoa, Tonga, Vanuatu, and the Cook Islands who continue to pay their premium in full.

Working together the participating PICs have been able to secure aggregate insurance coverage worth US\$43 million against tropical cyclones and earthquakes/tsunamis. This support is crucial given the exposure of the region to disasters.

The World Bank Group acts as an intermediary between PICs and a group of reinsurance companies—Sompo Japan Insurance, Mitsui Sumitomo Insurance, Tokio Marine & Nichido Fire Insurance, Swiss Re and Munich Re—that were selected through a competitive bidding process (See Figure 2).

Figure 2. Transaction structure



Source: World Bank Group (2014)

The pilot is designed to provide limited but immediate budget support following major disasters, such as earthquakes, tsunamis, and tropical cyclones. It helps mitigate short-term cash flow problems small developing economies face after such disasters. It is designed to cover PICs from a disruption in the provision of core public services but not intended to cover all post-disaster losses. To cover more frequent but less severe events, other financial instruments—such as national reserves and contingent credit—are more appropriate.

The pilot program is the first ever scheme in the Pacific to use parametric triggers, linking immediate post-disaster insurance payouts to specific hazard events. Unlike traditional insurance settlements that require an assessment of individual losses on the ground, the pilot's parametric policies do not pay out based on actual losses incurred. Instead, the payout disbursements are triggered by specific physical parameters for the disaster—such as wind speed and earthquake ground motion—taken from the Joint Typhoon Warning Centre and US Geological Services.

Technical Assistance on the Public Financial Management of Natural Disasters

1. *Development of an integrated disaster risk financing and insurance strategy.* The program assists ministries of finance in devising integrated disaster risk financing and insurance strategies. Such strategies (i) look at the mobilization and execution of funds in the onset of natural disasters and (ii) identifies different levels of disaster risk faced by countries to (iii) design cost-effective financial disaster risk management strategies.
2. *Development of post-disaster budget execution procedures.* The program assists ministries of finance in preparing operations manuals documenting current procedures and processes for post-disaster budget mobilization and execution.
3. *Insurance for key public assets.* The program helps ministries of finance develop insurance programs for key public infrastructure.
4. *Regional peer-to-peer learning.* Workshops between PICs are held regularly to create opportunities for sharing experience on the public financial management of natural disasters. The last workshop was convened in March 2014.

Tonga received US\$1.27 million from their catastrophe risk insurance policy on January 27, 2014, only two weeks after Tropical Cyclone Ian had swept across the nations Ha'apai island group. Tonga is the first country that received a payout under the *Pacific Catastrophe Risk Insurance Pilot*.

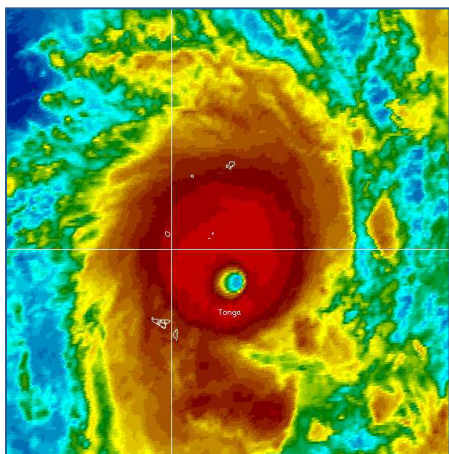
Lessons Learned

The pooling of country catastrophe risks and its placement through an aggregate portfolio resulted in significant cost savings (up to 50 percent) for participating PICs. The pilot has demonstrated that the international reinsurance market is not only willing to supply catastrophe risk insurance to PICs but to do so at competitive prices. It is estimated that each participating PIC has obtained a 50 percent reduction in their premium as a result of the portfolio approach versus an individual country approach.

Further institutional capacity building is needed. The Santa Cruz earthquake in the Solomon Islands did not result in a payout; the level of physical damage caused by this event was relatively low. This event demonstrates that there is a need to better communicate the benefits and limitations of the insurance pilot. It is not designed, for example, to cover the government against all disaster losses but rather to cover some portion of the losses from major disasters, such as those that may disrupt the operations of the central government and the provision of basic public services.

Catastrophe risk insurance should be complemented by other financial products to offer a more comprehensive coverage. Market-based catastrophe risk insurance products rely on parametric triggers to allow for rapid claims settlement, consequently they do not cover all financial loss. Other financial products should be developed to give PICs broader protection against natural disasters and to ensure access to immediate but limited funds in the onset of a disaster.

Figure 3: Infrared satellite image of Tropical Cyclone Ian taken over Tonga around 600 UTC



Source: NOAA (January 11, 2014)

Key Achievements

Catastrophe risk insurance received by Tonga following Tropical Cyclone Ian in January 2014. On January 11-12, 2014, Tonga experienced damage and destruction from Tropical Cyclone Ian, a category 5 cyclone. The Government of Tonga received US\$1.27 million from their catastrophe risk insurance policy on January 27, 2014, only two weeks after the event. Tonga is the first country to receive a payout under the *Pacific Catastrophe Risk Insurance Pilot*. The payout is equivalent to more than the 2013 contingency budget or half of the current reserves of the Tonga National Reserve Fund.

Successful placement of the Pacific catastrophe risk insurance program on the international reinsurance market at very competitive price. The pilot has demonstrated that the international reinsurance market is not only willing to supply catastrophe risk insurance to the PICs but to do so at very competitive prices. Models and standards have been established that can be used by local insurance companies.

The Program benefits from high-level government support of Pacific Island Nations. The Pacific DRFI program has been discussed and approved by Cabinet in the respective governments, showing support at the highest level of government.

The Program has contributed to an improved dialogue and cooperation between Ministry of Finance and National Disaster Management Offices. The ex-ante nature of an integrated DRFI strategy has required that the two ministries discuss how the existing procedures can be improved and in many cases has strengthened their relationship.

The Program has increased institutional capacity building on disaster risk financing. The required development of a post-disaster budget mobilization and execution document as part of the integrated DRFI strategy helps reduce the time it takes to purchase necessary relief goods and requires a detailed acquittal process on how the funds were spent. In addition, national and regional peer-to-peer DRFI workshops have been convened where countries discuss past experiences, lessons learned and how to optimize post disaster financial tools to improve post disaster budget execution.

The Pacific Disaster Risk Financing and Insurance Program was endorsed during the 2014 Forum Economic Ministers Meeting and the attending ministers requested the catastrophe risk insurance pilot to be extended.

Next Steps

The Pacific DRFI Program has achieved significant results, including the catastrophe risk insurance coverage of six PICs and institutional capacity building on disaster risk financing in the PICs. The program was endorsed during the 2014 Forum Economic Ministers Meeting. The attending ministers requested the catastrophe risk insurance pilot to be extended for an additional year. The Cook Islands joined the pilot in November 2013 and additional PICs, such as Fiji, have expressed interest in joining the Pacific DRFI Program.

The World Bank Group is developing a Pacific Resilience Program which includes a component on disaster risk financing and insurance. This program will further enhance the existing disaster risk financing and insurance arrangements via the development of a product to complement the catastrophe risk insurance pilot and via the provision of some limited financial support for the payment of insurance premiums of the participating PICs.

Additional funding is required. Donors play a critical role in enabling the participation of low-income countries through the provision of premium subsidies and technical assistance. The Government of Japan generously provided an additional US\$1 million to facilitate a third pilot season. This funding is now exhausted.

There is a need to agree upon a regional entity to manage the disaster risk financing and insurance program. The long-term sustainability of the Pacific DRFI program and the pilot scheme requires a discussion at the regional level to ascertain what form an independent facility should take to replace the intermediary role currently played by the World Bank Group.

About PCRAFI

The pilot and the Pacific DRFI Program form an integral part of the PCRAFI, an initiative of broader World Bank Group support to the Pacific region to develop a comprehensive program on disaster risk management and climate change adaptation.

Started in 2006 at the request of PICs, PCRAFI is a joint initiative between the World Bank Group, the Secretariat of the Pacific Community, and the Asian Development Bank, with financial support from the Government of Japan, the Global Facility for Disaster Reduction and Recovery, the ACP/EU Natural Disaster Risk Reduction Program, and with technical inputs from GNS Science, Geoscience Australia, and AIR Worldwide.

The Pacific Island Countries involved in PCRAFI are: Cook Islands, Federated States of Micronesia, Fiji, Kiribati, Marshall Islands, Nauru, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Timor-Leste, Tonga, Tuvalu, and Vanuatu.

Further Information

<http://pacris.sopac.org>
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