Pacific Disaster Risk Financing and Insurance Program

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

Background

Extreme natural events have affected more than 9.2 million people in the Pacific region since 1950 and caused damage in excess of US$3.2 billion, with tropical cyclones being the major cause of this loss and damage (World Bank 2011). During 2012-2013 the Pacific has experienced several disasters, two severe floods in Fiji, Tropical Cyclone Evan that affected both Samoa and Fiji and a magnitude 8.0 earthquake and subsequent tsunami in the Solomon Islands.

Figure 1. Average Annual Loss (US$ mm)

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 the options available for post disaster finance and place significant additional constraints on the national budget. Alternatives such as contingent credit and risk transfer options could be used to reduce the drain on limited public funds.

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

This program is one 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 (GFDRR). The Pacific region-wide PCRAFI aims to provide a full spectrum of both financing and physical disaster risk management tools to PICs.

Development Objective

The development objective of the Pacific DRFI program is to increase the financial resilience of the PICs against natural disasters and to improve their capacity to meet post-disaster funding needs without compromising their fiscal balance. Access to budget support in the aftermath of a disaster is essential for the governments to ensure immediate and effective post-disaster response. While donor funds will always be required there will always be an element of uncertainty surrounding how much will be provided. Consequently, over-dependency on international relief as a source of post disaster finance could create delays to the provision of initial relief.

Program Components

The Pacific DRFI Program builds on two main components: (i) Technical assistance and capacity building on public financial management of natural disasters; and (ii) pilot implementation of market-based sovereign catastrophe risk insurance solutions.

Technical Assistance on Public Financial Management of Natural Disasters

This component provides the PICs with technical assistance and capacity in public financial management procedures for budget mobilization and post-disaster budget execution.
The Pacific Disaster Risk Financing and Insurance (DRFI) Program assists the PICs in reducing their financial vulnerability to natural disasters. The Pacific DRFI Program is a joint initiative by the World Bank, the Secretariat of the Pacific Community (SPC/SOPAC) and their partners, with grant funding from the Government of Japan.

1. Development of an Integrated Disaster Risk Financing and Insurance Strategy. The program assists the Ministry of Finance (MoF) in devising an integrated disaster risk financing and insurance strategy. This strategy looks at the mobilization and execution of funds post disaster and identifies the different levels of disaster risk faced by each country to design cost-effective financial disaster risk management strategies.

2. Development of Post Disaster Budget Execution procedures. The program assists the MoF to prepare an operations manual documenting the current procedures and processes for post disaster budget mobilization and execution processes.

3. Insurance for Key Public Assets. The program helps the Ministry of Finance develop an insurance program for key public infrastructure.

4. Regional peer learning exchange. Regional peer exchange workshops between PICs are held to give the PICs an opportunity to share their experience on the public financial management of natural disasters. A previous workshop was convened in May 2012 and the next workshop is tentatively scheduled for spring 2014. This component is available to all PICs and is currently offered to Cook Islands, Republic of the Marshall Islands, Solomon Islands, Samoa, Vanuatu and Fiji, at the request for their respective Ministry of Finance.

Pacific Catastrophe Risk Insurance Solutions

The Pacific catastrophe risk insurance pilot aims to test the viability of market-based catastrophe risk insurance solutions for the Pacific island countries.

The pilot was launched in January 2013 with five PICs - Marshall Islands, Samoa, Solomon Islands, Tonga, and Vanuatu – and was joined by Cook Islands for its Season 2 (from November 1, 2013 until October 31, 2014). The pilot’s expansion follows the request of countries during the 2013 Forum Economic Ministers Meeting in Tonga to grow the program beyond the five pilot countries. Aggregate insurance coverage of the participating countries has increased from US$45 million to US$67 million, with further premium reductions for participating countries.

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

Figure 2. Catastrophe swap transaction structure

The pilot is designed to provide limited but immediate budget support following a major disaster (earthquakes, including tsunamis, and tropical cyclones). It helps PICs mitigate the short-term cash flow problems that small developing economies face after major natural disasters. It is not designed to cover PICs from all disaster losses, but rather to cover against major disasters that could disrupt the provision of core public services. Other financial instruments, such as national reserves and contingent credit, are more appropriate to cover more frequent but less severe events.

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 (e.g., wind speed and earthquake ground motion) taken from the Joint Typhoon Warning Centre and the US Geological Services (USGS).
Participating PICs made a contribution towards their insurance premiums in Season 2 with the Cook Islands paying their premium in full. The Government of Japan provided premium subsidies to help cover the remaining cost of the premiums.

Main Lessons Learned

The placement of the aggregate portfolio of country-specific catastrophe risk insurance policies resulted in significant cost savings (up to 50 percent) for the participating Pacific island nations. The country-specific catastrophe risk insurance policies placed on the international reinsurance market as a single portfolio have the advantage of regional risk diversifications benefits and regional economies of scale. It is estimated that each participating PIC has obtained a 50 percent reduction in premium as a result of the single portfolio versus a single country approach. See Figure 3.

Figure 3. Catastrophe risk pooling benefits

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 however demonstrates that there is a need to better communicate that the benefits and limitations of the insurance pilot; for example, it is not designed 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.

Key Achievements

Catastrophe risk insurance received by Tonga following TC 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. Support has been expressed by senior Government Officials at key international and regional meetings such as the UNISDR Global Platform for Disaster Risk Reduction, the Joint Pacific Platform for Disaster Risk Management and Climate Change. It has been discussed at the Pacific Forum Economic Ministers Meeting (FEMM) in 2013 and is already scheduled for discussion at the 2014 FEMM.

The Program has contributed to an improved dialogue and cooperation between MoF 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 improved their relationship. Many PICs now require the reallocation of a staff member from the MoF to the National Disaster Management Office to manage the procurement and acquittal of relief supplies.

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The Program has built 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 fund 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.

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. See next page on Results Reporting. The Program was endorsed during the Forum Economic Ministers Meeting 2013 and the Ministers requested that the catastrophe risk insurance pilot be extended. The Cook Islands joined the pilot in November 2013 and additional PICs such as Fiji and Papua New Guinea have expressed interest in joining the Pacific DRFI Program.

Additional funding is required. Donors play a critical role enabling the participation of low-income countries through the provision of premium subsidies and the technical assistance. The Government of Japan initially provided US$5.7 mm, including US$3 mm for premium subsidies. This initial funding will be exhausted by mid-2014. Additional funding is being sought to continue the provision of technical assistance and premium subsidies to low-income PICs for the Pacific catastrophe risk insurance pilot for at least 2 more years to further demonstrate the development impact of this program.

Establishment of a dedicated facility is under consideration. The long term sustainability of the Pacific DRFI program and the pilot scheme requires discussion at the regional level to ascertain if an independent facility should be established to replace the intermediary role currently played by the World Bank.

The continuation of the pilot for at least two more years would enable discussion among on the sustainability of the program in terms of establishing sustainable sources of finance and whether an independent entity should be established. This discussion has begun with PICs during FEMM 2013 but given the innovative nature of this financial solution to disaster risk management the work involved in the program countries needs time to establish what the best option is for continuation of the program.

About PCRAFI

The pilot and the Pacific DRFI Program form an integral part of the Pacific Catastrophe Risk Assessment and Financing Initiative (PCRAFI), an initiative of broader World Bank 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, the Secretariat of the Pacific Community (SPC/SOPAC), and the Asian Development Bank, with financial support from the Government of Japan, the Global Facility for Disaster Reduction and Recovery (GFDRR), 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 Reading

http://pacris.sopac.org or contact PCRAFI@spc.org

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