Challenge

Pacific Island Countries (PICs) are among the most vulnerable countries in the world, threatened by the risk of tropical cyclones, earthquakes and tsunamis that cause fiscal shocks and humanitarian crises. On February 12, 2018, Tropical Cyclone Gita struck Tonga, a Category 4 event that impacted nearly 50% of its population, destroyed 1,200 homes and caused damage estimated at US$61.7 million.¹

At the onset of a natural hazard event, governments require rapid-response, disaster risk financing instruments that provide immediate liquidity to cover emergency response and maintain basic public services. However, access to short-term liquidity is often constrained due to the small size of island economies, which in turn restricts their borrowing capacity and access to financial markets. Compounding this effect, PICs generally have limited budget reserves, which often force governments to reallocate public resources away from national development priorities – and can have adverse, long-term economic impacts. Without easy access to debt and robust financial markets, the ability of governments to quickly respond to provide humanitarian relief services is dramatically reduced.

Approach

The PCRAFI Program – Phase II: Furthering Disaster Risk Finance in the Pacific – scales-up regional collaboration to increase the financial resilience of Pacific Island Countries (PICs) against natural hazards and their capacity to meet post-disaster funding needs. In 2016, more than US$40 million in grants was mobilized for PICs through the G7 initiative on climate risk insurance – InsuResilience Global Partnership² – to establish the PCRAFI Multi-Donor Trust Fund (MDTF) with generous contributions from Germany, Japan, the United Kingdom and the United States.

The five-year program is implemented in collaboration with regional development agencies and the Disaster Risk Financing and Insurance Program (DRFIP) – a partnership between the Global Facility for Disaster Reduction and Recovery (GFDRR) and the World Bank Group.

Phase II is designed in two programmatic areas:

- **Track I: Pacific Catastrophe Risk Insurance Company** – Establishment and operations of the Pacific Catastrophe Risk Insurance Company (PCRIC) – a regional catastrophe insurance platform dedicated to the provision of climate and disaster insurance for PICs

- **Track II: PCRAFI Technical Assistance** – A multi-layered program to strengthen institutional capacity on climate and disaster risk finance at three levels of engagement: national, regional and PCRIC

Achievements

| $6.7m | Cumulative payouts to governments since the inception of sovereign catastrophe risk insurance for PICs in 2013
| $45m | Total coverage purchased in Season 6 for policies protecting against tropical cyclones and earthquakes/tsunamis
| $3.5m | Payout received by Tonga, the third and largest payout to date, following Tropical Cyclone Gita in February 2018
| $24m | Capitalization funds provided to PCRIC from donor partners through the InsuResilience Global Partnership and PCRAFI Multi-Donor Trust Fund

- **19% Increase in PCRIC’s insurance capacity** to offer governments greater access to rapid-response financing for disaster relief

- **6th Season of catastrophe risk insurance** began November 1, 2018 with PCRIC issuing eight policies to its five current members – the Cook Islands, Marshall Islands, Solomon Islands, Tonga and Vanuatu

- **4 International reinsurers provide protection** for PCRIC’s current portfolio – AXA, Hannover Re, Liberty and Mitsui Sumitomo Insurance (MSI)

- **2 Feasibility studies for new products are underway** for a volcano product and a rainfall product (for both excess rainfall and drought) to expand coverage for additional hazards

“The insurance payout from PCRIC has substantially improved our financial capacity to respond swiftly to the most pressing needs of those affected by the cyclone.”

- Honorable Pohiva Tu’ionetoa, Minister of Finance - Tonga

¹ The cost of damages was calculated by the PCRAFI Insurance Model, estimated at US$61,748,780.
² http://www.insuresilience.org/
Implementation Framework

Track I: Pacific Catastrophe Risk Insurance Company

A regional catastrophe insurance platform

Establishment and operations of the Pacific Catastrophe Risk Insurance Company (PCRIC), a regional catastrophe insurance platform dedicated to provide parametric climate and disaster insurance for PICs

Components

1. Establishment and Operations

Technical and legal support is provided to PCRIC and the Pacific Catastrophe Risk Insurance Foundation (PCRIF), the two legal entities that comprise the PCRAFI Facility

2. Capitalization of PCRIC

Initial capitalization funds are transferred to PCRIC - a captive insurance company - to initiate its key functions: retain and manage a portion of the risk portfolio; generate cost reduction and make rapid insurance payouts to countries in the event a policy is triggered

3. Monitoring and Evaluation

Participating countries and the PCRIC collaborate to design a uniform evaluation process to report on the execution of a payout when an policy is triggered

4. Development of Disaster Risk Insurance Products

PCRIC is responsible to design new insurance products to cover additional hazards (e.g. excess rainfall and drought) and incentivize new countries to purchase catastrophe risk insurance

Track II: PCRAFI Technical Assistance

Strengthening capacity for disaster risk finance

A multi-faceted program that provides technical assistance on disaster risk finance at three levels of engagement – national, regional and PCRIC – and is implemented in three thematic areas or components

Components

1. Market-Based Instruments

Technical assistance supports initial operations of PCRIC, including the review of technical documents of initial activities to ensure accelerated implementation of catastrophe risk insurance, such as an annual portfolio analysis and validation of the reinsurance package; activities also encourage public-private partnerships (PPP) with the private sector to identify insurance gaps and design interventions to crowd in the market

2. Public Financial Management

Activities focus on the development national disaster risk financing strategies to strengthen post-disaster public financial management, including: post-disaster budget execution, mobilization and reporting, and contingency plans

3. Knowledge Management and Learning

Knowledge exchange activities convene PICs and similar regional risk pools to facilitate technical collaboration, and include professional training and higher education opportunities on climate and disaster risk finance

Impact: US$3.5 Million Payout to Tonga

On February 12th, 2018 Tropical Cyclone Gita made landfall on Tonga with Category 4 winds. The event triggered a calculation notice to PCRIC, resulting in a US$3.5 million payout, the maximum amount on Tonga’s parametric insurance policy against cyclones and the largest payout to date. The government received the transfer within seven days of the event, providing almost immediate access to emergency funds to pay for disaster response and humanitarian relief efforts.

PacRIS - Pacific Risk Information System

A geospatial data management platform that provides a central repository for national and regional hazard and exposure data, which are necessary inputs to run the insurance model that underpins the PCRAFI Insurance Program. The regional database increases access from both public and private sectors to facilitate the use of risk information in investment planning and decision-making processes.
FURTHERING CLIMATE AND DISASTER RISK FINANCE IN THE PACIFIC

“This evolution of PCRAFI is a major advancement in the region to mitigate against the financial impacts caused by extreme climate, weather related and geological hazards. Countries have full ownership of the PCRAFI Facility, putting finance ministers in the driving seat for product development and for designing financial instruments that fit national disaster risk financing strategies.”

- Dame Meg Taylor, Secretary-General of the Pacific Islands Forum

Implementing Agencies

The PCRAFI Program leverages technical expertise of regional agencies: the Pacific Catastrophe Risk Insurance Company (PCRIC), the Pacific Community (SPC), and the Pacific Islands Forum Secretariat (PIFS), and is implemented in collaboration the World Bank Group’s DFRIP.

- **PCRIC** – Captive insurance company responsible for issuing policies and new product development for member countries
- **PIFS** – Regional lead in convening political dialogue and knowledge exchange
- **SPC** – Technical agency with key experience in hazard and risk information and assessments

Organizational Structure - PCRAFI Program

PCRAFI Facility
- Pacific Catastrophe Risk Insurance Foundation (PCRIF)
- Council of Members (CoM)
- Auditor
- Insurance Mgr.
- CEO

PCRAFI Technical Assistance
- Pacific Catastrophe Risk Insurance Company (PCRIC)
- Board of Directors

PCRAFI Multi-Donor Trust Fund (MDTF)
- Steering Committee - MDTF
- Observers: Up to Two Pacific Island Countries
- Donor Partners
- World Bank Group (Chair)

This map is for illustrative purposes. The boundaries, colors, denominations and any other information shown on this map do not imply, on the part of The World Bank Group, any judgment on the legal status of any territory, or any endorsement or acceptance of such boundaries.
Next Steps

Moving forward the Program will focus on the technical assistance activities outlined in Track II.

- Update the regional exposure database stored in the Pacific Risk Information System (PacRIS)
- Design new additional climate and disaster risk insurance products such as excess rainfall and drought
- Bring together 14 PICs, regional agencies and international experts for a regional forum on climate and disaster risk finance
- Increase the number of participating PICs within the PCRAFI Insurance Program
- Develop national contingency plans and ex post reporting procedures for payouts in collaboration with PICs

Evolution of PCRAFI

The PCRAFI Program – Phase II builds upon 10 years’ experience in disaster risk finance and insurance, working across the Pacific with regional agencies, governments, donors and the World Bank Group. Beginning in 2007, ministers of finance from PICs and development partners began to explore catastrophe risk insurance as a regional mechanism to enhance the financial resilience of PICs. This catalyzed the Pacific Catastrophe Risk Assessment and Financing Initiative (PCRAFI) – Phase I, which laid the technical foundation and acquired the requisite data to model a catastrophe risk insurance pool. By 2013, the PCRAFI Insurance Pilot offered policies to participating PICs with coverage against both tropical cyclones and earthquakes/tsunamis, and proved successful as a rapid-response financing instrument.

During the 2015 Forum Economic Ministers’ Meeting (FEMM), Ministers of Finance made a collective decision to create the PCRAFI Facility, the region’s first catastrophe risk insurance pool. Extensive collaboration with regional agencies, countries and technical partners led to the design of the PCRAFI Program, with financial support from the PCRAFI Multi-Donor Trust Fund (MDTF) launched in 2016. The Program draws on lessons from similar regional risk pooling mechanisms, such as: the African Risk Capacity (ARC), the Caribbean Catastrophe Risk Insurance Facility (CCIRF) and the South East Europe and Caucasus Catastrophe Risk Insurance Facility (SEE CRIF).

Timeline of PCRAFI and Disaster Risk Finance in the Pacific

Launch of the Pacific Catastrophe Risk Assessment and Financing Initiative (PCRAFI)

Representatives at FEMM ’07 requested support from the WBG to scope an appropriate regional insurance model for immediate post-disaster response

An extensive data collection effort began to update hazard and exposure data using a new database – PacRIS – to host regional and national data

After two years of development, the PCRAFI insurance model was ready for use to calculate climate and disaster risk

Four donor countries – Germany, Japan, the UK and the U.S. – contributed US$40 million to establish the PCRAFI Multi-Donor Trust Fund (MDTF) to finance the PCRAFI Program

Four separate entities formed on June 10, 2016, the Pacific Catastrophe Risk Insurance Facility (PCRFIC) and the Pacific Catastrophe Risk Insurance Company (PCRIC) and the PCRAFI Facility legally established

Two separate entities formed on June 10, 2016, the PCRAFI Multi-Donor Trust Fund (MDTF) to finance the PCRAFI Program

PCRFIC and PCRIC

Country Risk Profiles

14 risk profiles were updated in PacRIS and used in the model to solicit reinsurers for the PCRAFI Insurance Pilot

Decision to establish the PCRAFI Facility

At FEMM ’15, ministers of finance agreed to establish the PCRAFI Facility to offer affordable insurance for emergency financing for climate and seismic hazards

Earthquake - Solomon Islands

Season 3 PCRAFI Insurance Pilot

January 17, 2013

Tonga received US$1.3 million within 10 days of Tropical Cyclone Ian

First discussion on a regional catastrophe insurance model

During the 2015 Forum Economic Ministers’ Meeting (FEMM), ministers of finance from PICs and development partners began to explore catastrophe risk insurance as a regional mechanism to enhance the financial resilience of PICs.

Moving forward the Program will focus on the technical assistance activities outlined in Track II.

Timeline of PCRAFI

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<th>Event</th>
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<tr>
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