

Financing Options and Issues

Session 6: Access to Financing Options and Instruments

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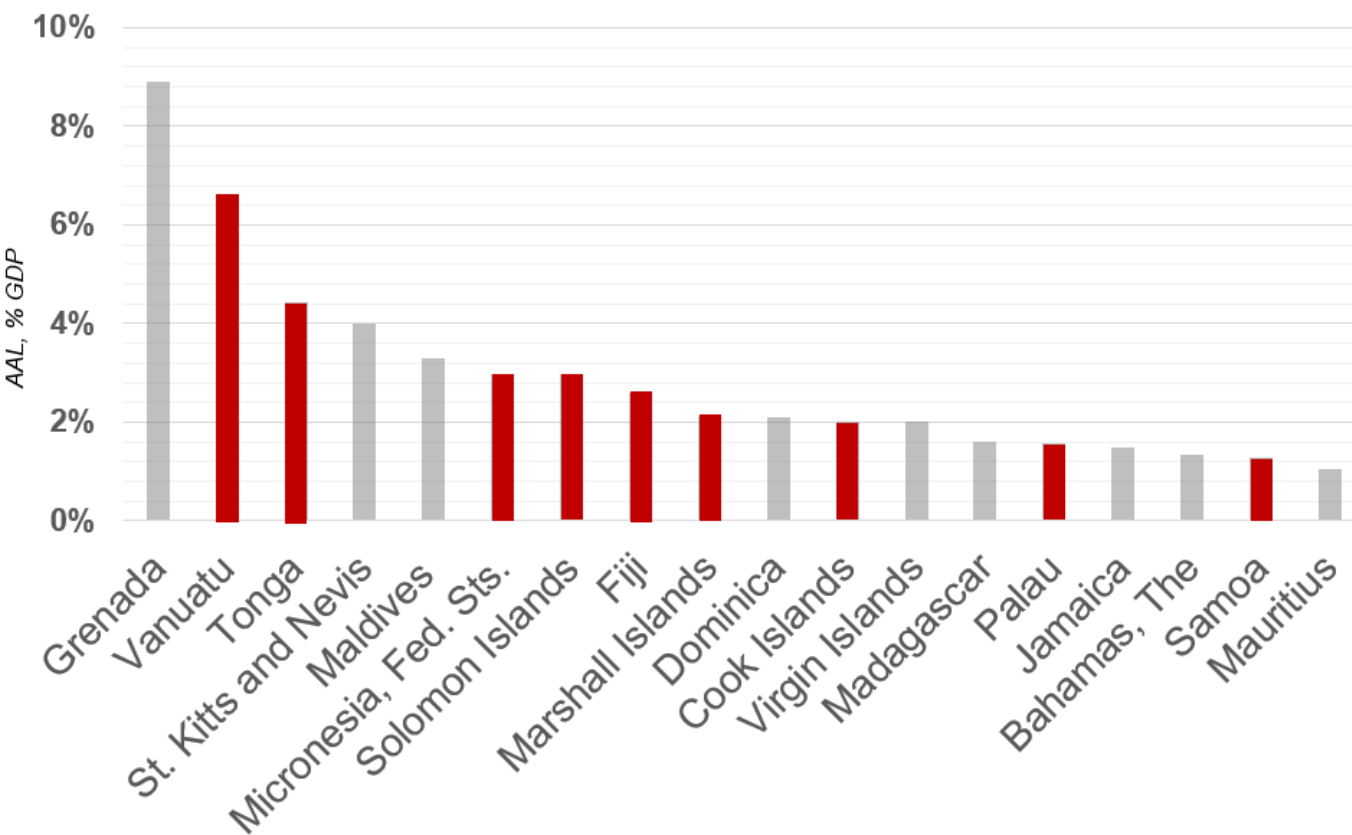


Disaster Risk Financing
& Insurance Program



Ten FICs belong to the 30 countries most vulnerable to natural disasters

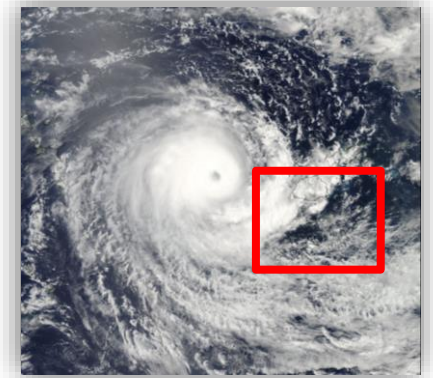
Average Annual Loss as a percentage of GDP of Island States



Source: PCRAFI (2014)

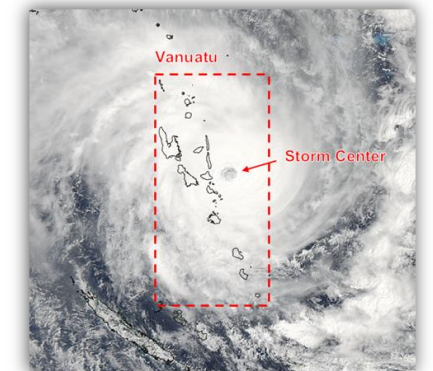
TC Winston – Fiji (2016)

- Affected **62%** of the population
- Causing **US\$900 million** in damage and loss



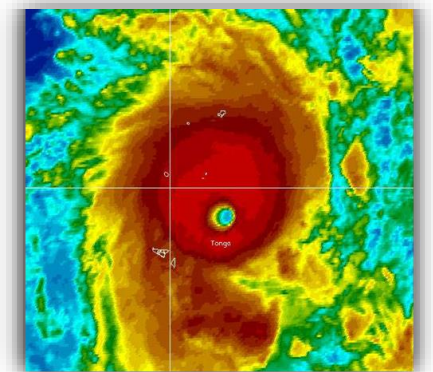
TC Pam - Vanuatu (2015)

- Damage and loss of **US\$450 million**, equivalent to **64%** of Vanuatu's gross domestic product (**GDP**)



TC Ian - Tonga (2014)

- Damage and loss of **US\$50 million**, equivalent to **11%** of GDP



Financial protection is a key component of DRM

Pillar 1: Risk Identification

Risk assessment and risk communication

Pillar 2: Risk Reduction

Structural and non-structural measures; infrastructure, land-use planning, regulation

Pillar 3: Preparedness

Early warning systems; support of emergency measures; contingency planning

Pillar 4: Financial Protection

Assessing and reducing contingent liabilities; budget appropriation and execution; ex-ante and ex-post financing instruments

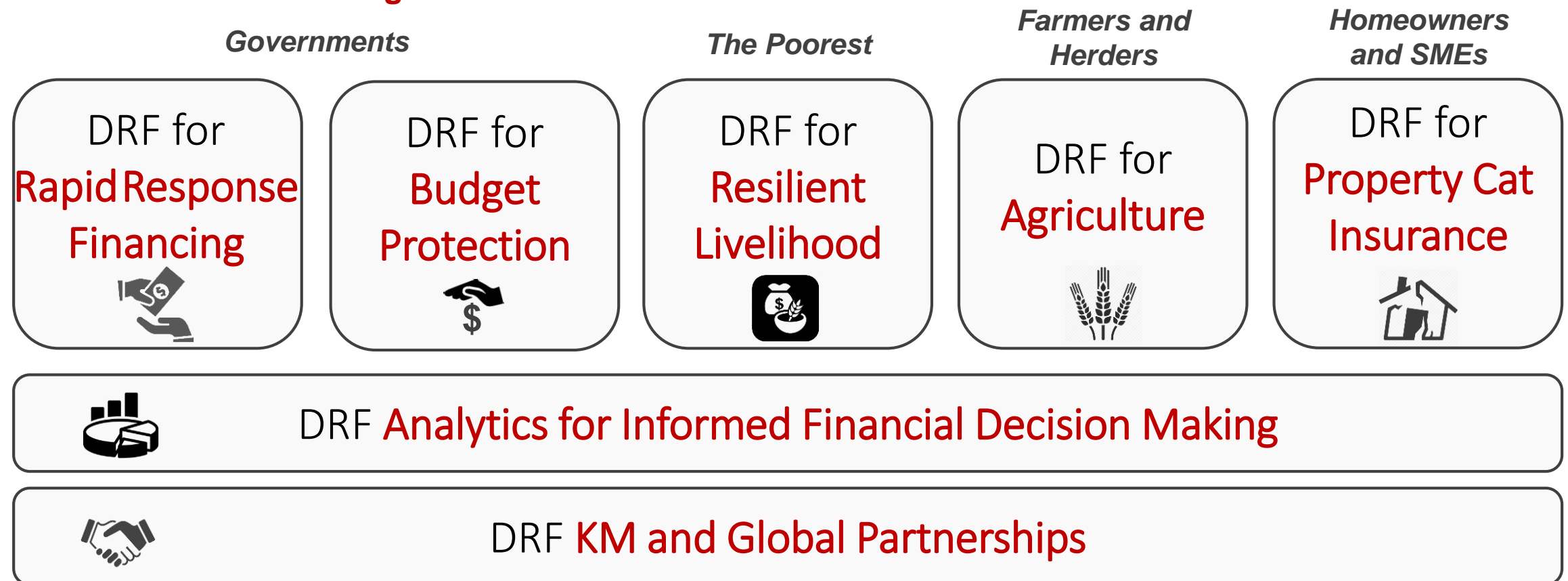
Pillar 5: Resilient Recovery

Resilient recovery and reconstruction policies; ex-ante design of institutional structures

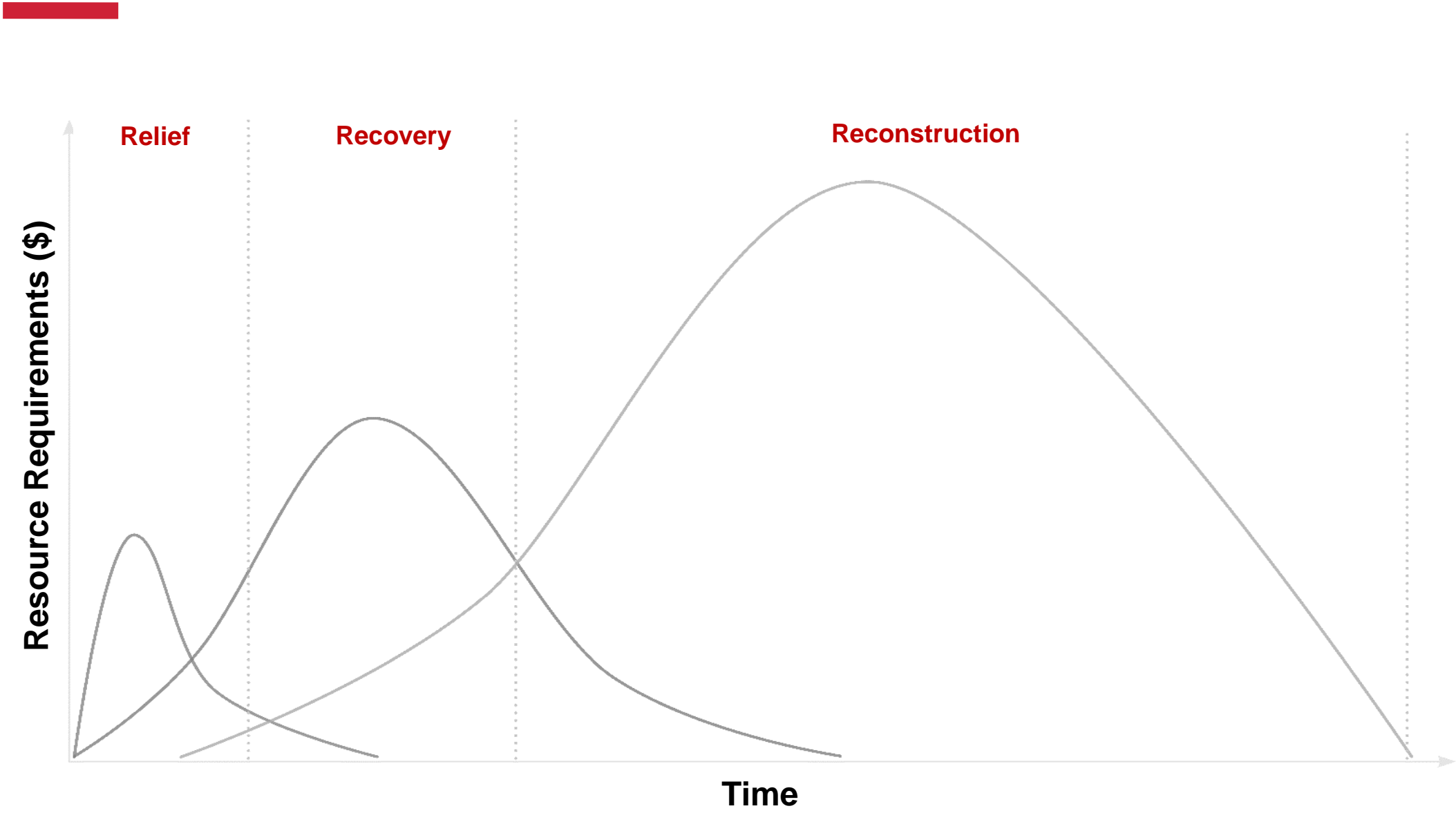
Disaster Risk Financing and Insurance Program

DRFIP development objective to **increase financial resilience** of the countries through **minimizing the cost and optimizing the timing of meeting post-disaster funding**.

To achieve this objective, DRFIP provides the countries with **Analytical & Advisory Services, Financial Services and Convening Services** on Disaster Risk Finance.

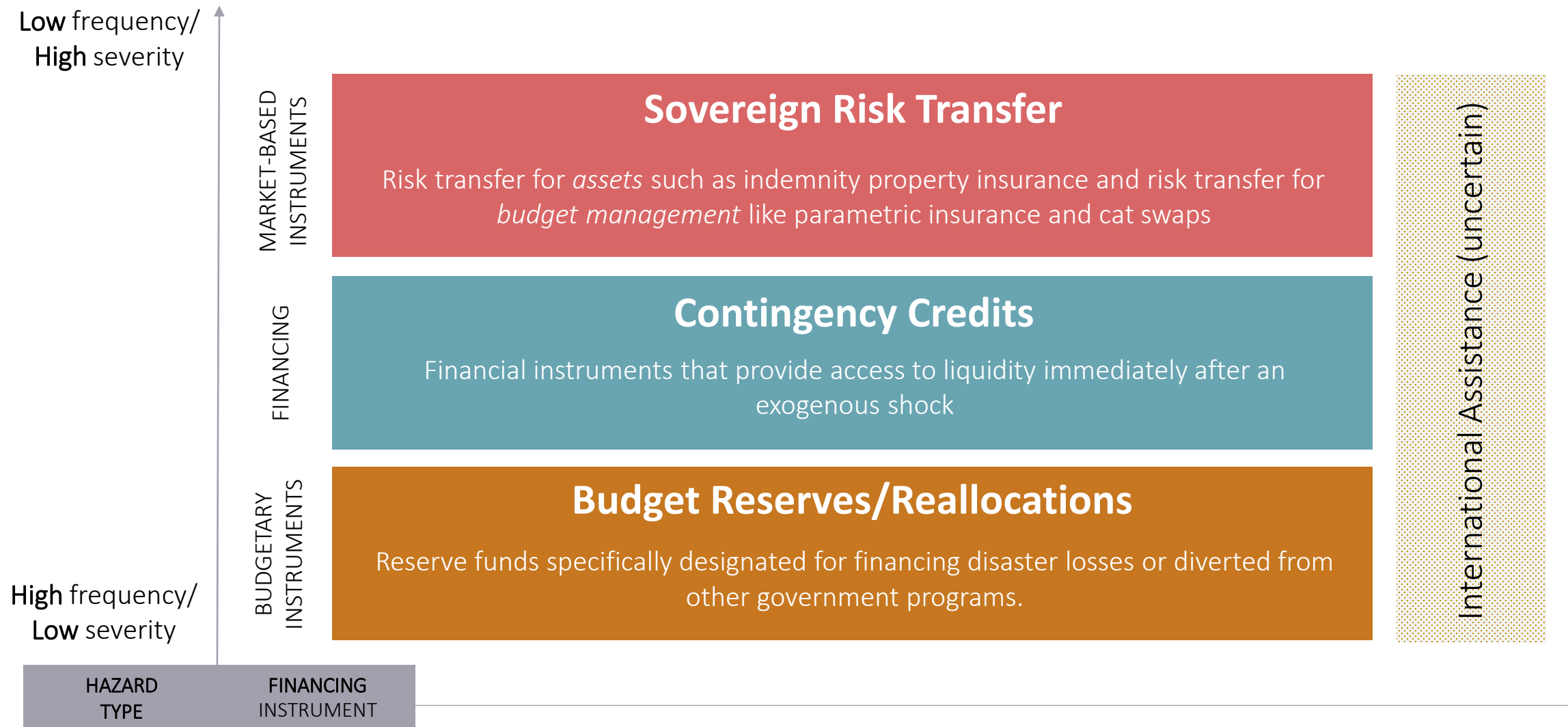


Timeline of Post-Disaster Financing Needs



Three-tiered risk layering strategy for governments

Instruments to be structured to ensure timely, comprehensive, cost-effective coverage



1st Layer: Budget Reserves/Reallocations

Three-tiered risk layering strategy

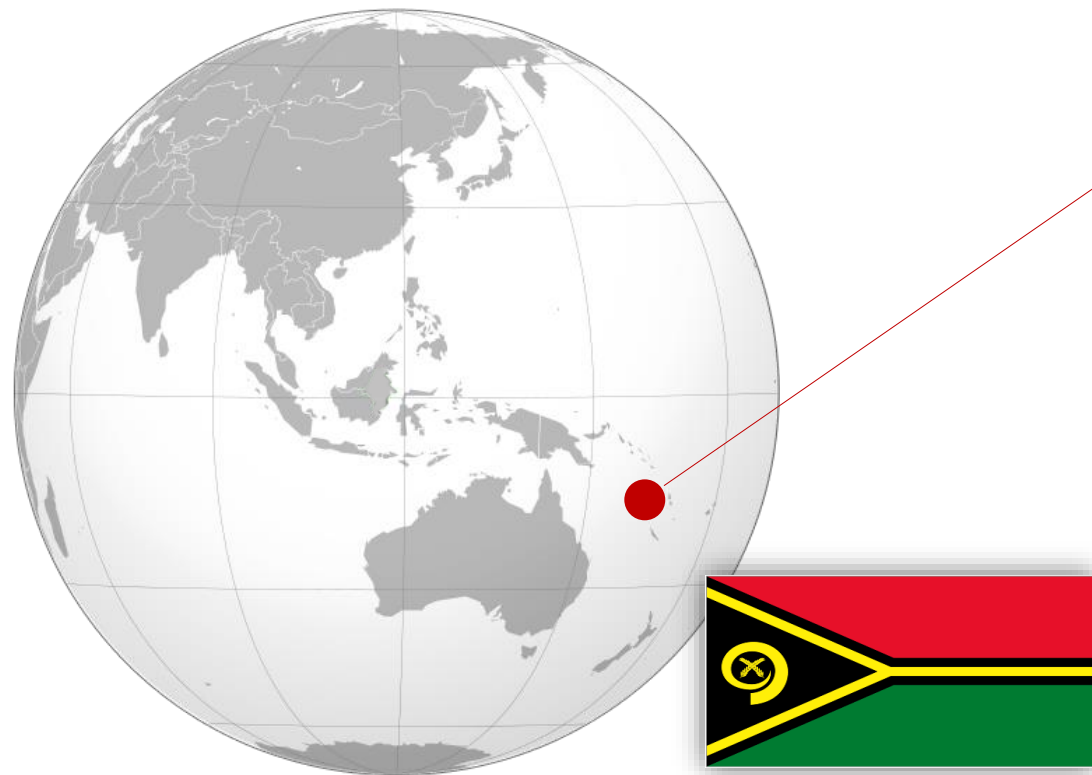
Sovereign Risk Transfer

Contingency Credits

Budget Reserves/Reallocations

Reserve funds specifically designated for financing disaster losses or diverted from other government programs.

International Assistance



VANUATU

CONTINGENCY BUDGET

- For Low-risk layer (Localized Flood, Landslides)
- Contingency Budget: VT\$135m (US\$1.4m)
- Disaster Provision Funds: VT25m (US\$0.26m)

BUDGET REALLOCATION

- Transfers (virements) within ministries only from operational budget (not personnel costs)
- App. 34% of Vanuatu's total budget could be reallocated; VT 516.5m (US\$5.4m) in 2013

SUPPLEMENTARY

- Following state of emergency or financial emergency
- App. VT95m (US\$1m) released following TC Vania in 2011

2nd Layer: Contingency Credits

Three-tiered risk layering strategy

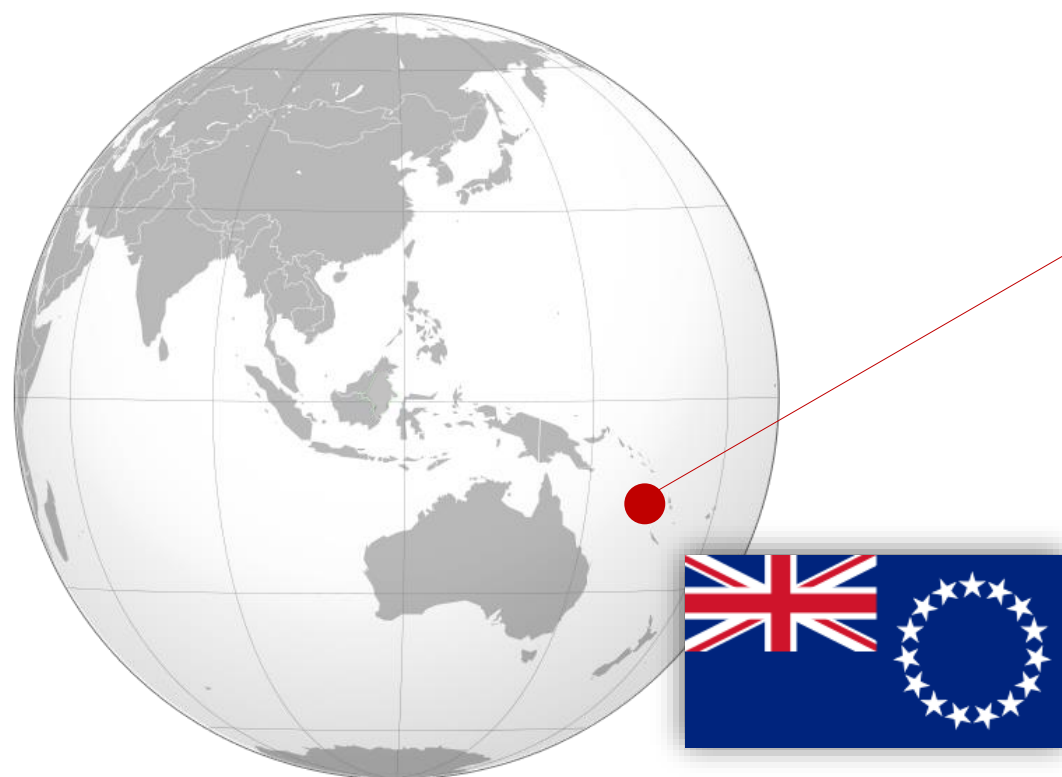
Sovereign Risk Transfer

Contingency Credits

Financial instruments that provide access to liquidity immediately after an exogenous shock.

Budget Reserves/Reallocations

International Assistance



COOK ISLANDS

CONTINGENCY CREDIT

- A NZ\$13.95m (app. US\$10m) policy-based loan from the Asian Development Bank (ADB) approved in 2016
- it will rapidly make available financing in the event of a disaster.
- program supports implementation of the government's National Sustainable Development Plan

3rd Layer: Sovereign Risk Transfer

Three-tiered risk layering strategy

Sovereign Risk Transfer

Risk transfer for assets such as indemnity property insurance and risk transfer for budget management like parametric insurance and cat swaps

Contingency Credits

Budget Reserves/Reallocations

International Assistance



PACIFIC CATASTROPHE RISK INSURANCE FACILITY

SOVEREIGN RISK POOLING

- Parametric catastrophe insurance pool
- Insurance captive owned by the PCRAFI Foundation
- Coverage: tropical cyclones, earthquakes (including tsunamis)
- Members: Vanuatu, Marshall Islands, Cook Islands, Tonga, Samoa
- Payouts since 2013: US\$3.1m
- Linked with risk reduction and preparedness investments



Disaster Risk Financing
& Insurance Program



Shifting from Crisis Responder to Risk Manager

World Bank Disaster Rapid Response Financing Instruments

Instrument	Description
Ex-Post Instruments	
Crisis Response Window	Enables rapid financing for post disaster recovery and reconstruction in the aftermath of a natural disaster
Trust Funds	Established after an event to help finance particular activities (e.g. reconstruction)
Ex-Ante Instruments	
Contingent Credit – Development Policy Financing with Catastrophe Deferred Draw Down Option (CAT-DDO)	Allows borrower to secure immediate access to liquidity (as budget support) post disaster (natural events and health-related events). Available for IBRD countries. Will be available for IDA countries from July 2017 .
Contingency Emergency Response Component (CERC)	Allows a country rapid access to a portion of its undisbursed IDA balances to address immediate post-crisis financing needs to respond to natural disasters.

CAT DDO



✓ **Builds on DRM policy dialogue**

- Strengthen national disaster management plans



✓ **Provides rapid response financing**

- Approved in advance; disburses quickly once a disaster strikes & triggers are met



✓ **Complements other rapid response financing instruments**

- Crisis Response Window (CRW)
- Parametric insurance (e.g., PCRAFI)



✓ **Offers flexible funding options**

- IBRD countries: Performance based allocation (100%)
- IDA: Performance based allocation (50%); undisbursed balances; Scale up Facility

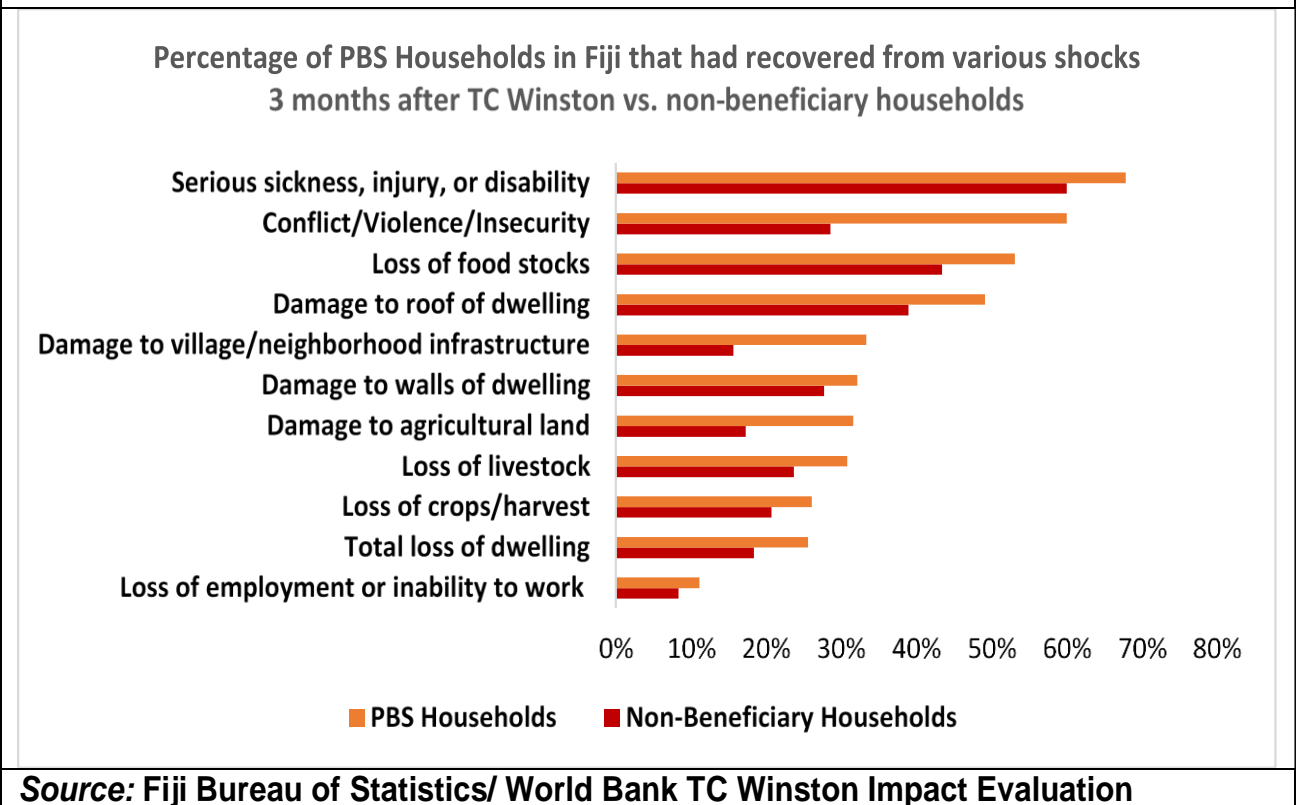
Reaching the affected population

Scaling up social protection programs can speed up the recovery phase

Foundation of scalable social protection

1. **Existing program** that has sufficient footprint, design flexibility and comprehensive delivery system
2. **Information streams** to determine responses and inform decision-making
3. **Pre-agreed** source of finance
4. **Institutional** coordination & capacity

Beneficiaries of adaptive safety nets are quicker to recover from shocks



Key Decision during FEMM 2015

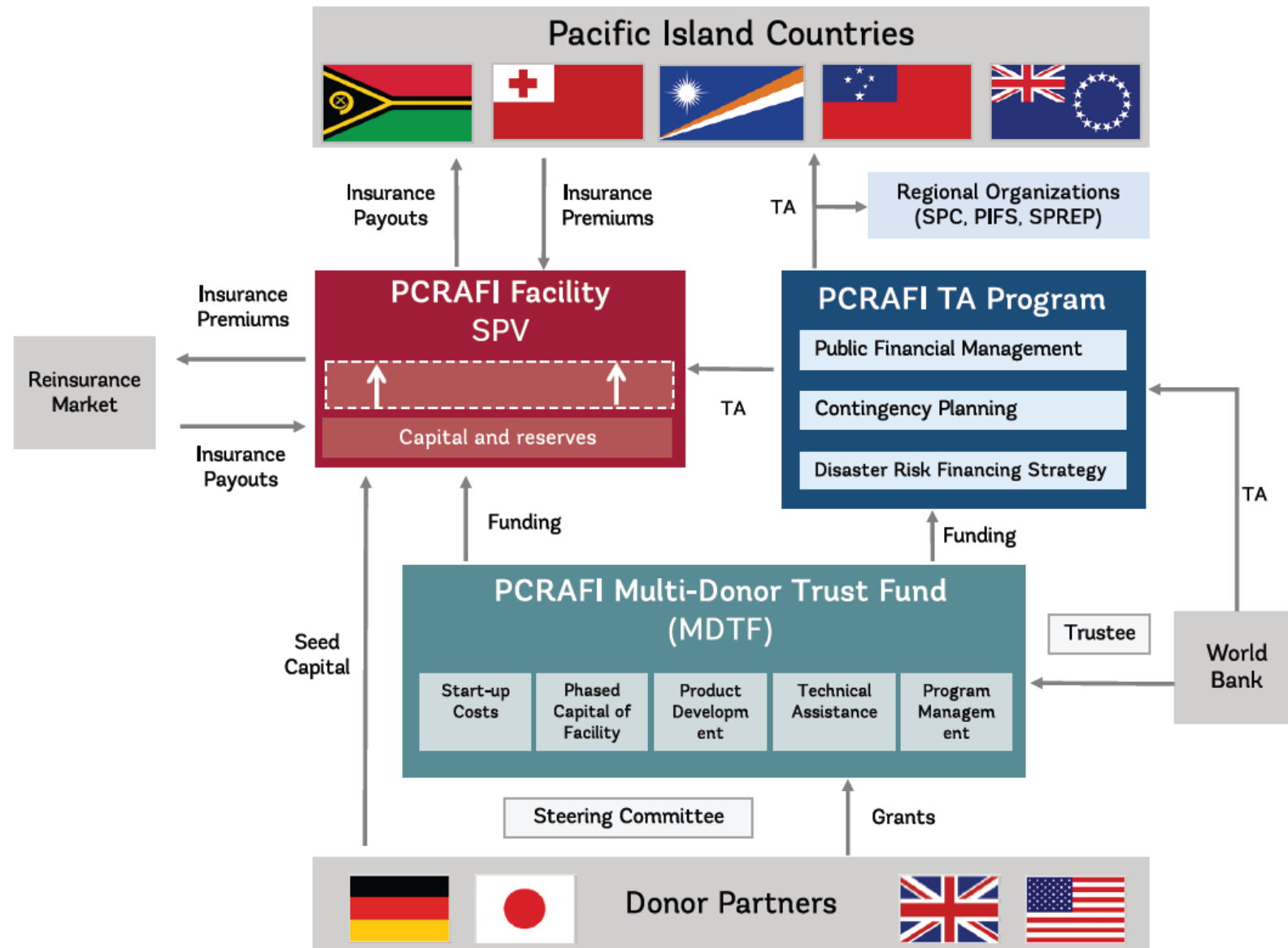
Ministers **agreed to establish** the PCRAFI Facility to provide disaster and climate insurance and to give the PICs with **greater regional ownership over climate risk financing** and the design of future disaster and climatic risk solutions.

(2015 Forum Economic Ministers Action Plan).

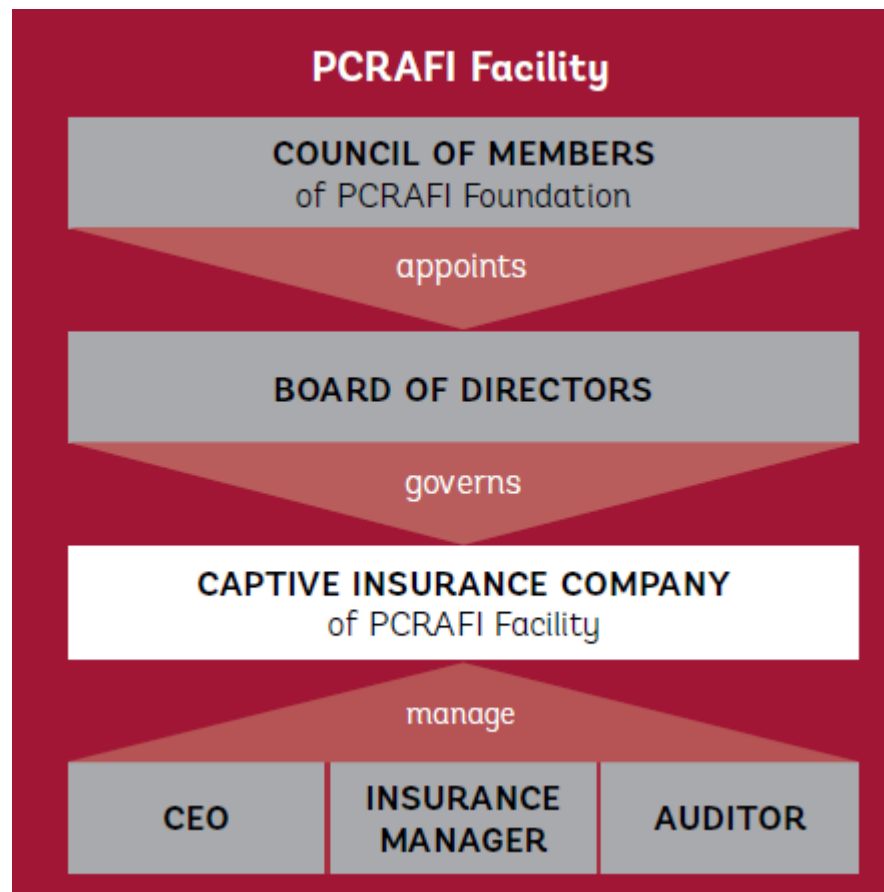


Forum Economic Ministers Meeting in Rarotonga in October 2015.

PCRAFI MDTF



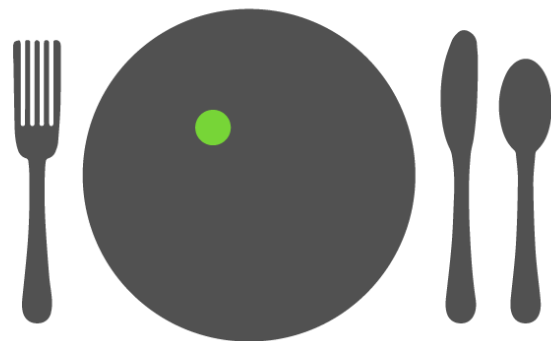
PCRAFI Facility



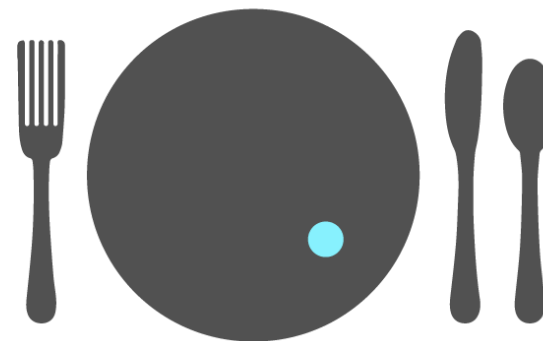
- Established June 2016
- Capitalized
- Insurance Manager appointed
- Issued first insurance policies
Nov 1, 2016
- Recruitment of CEO and Board of Directors underway

Sovereign Catastrophe Risk Pools

Individual country risk

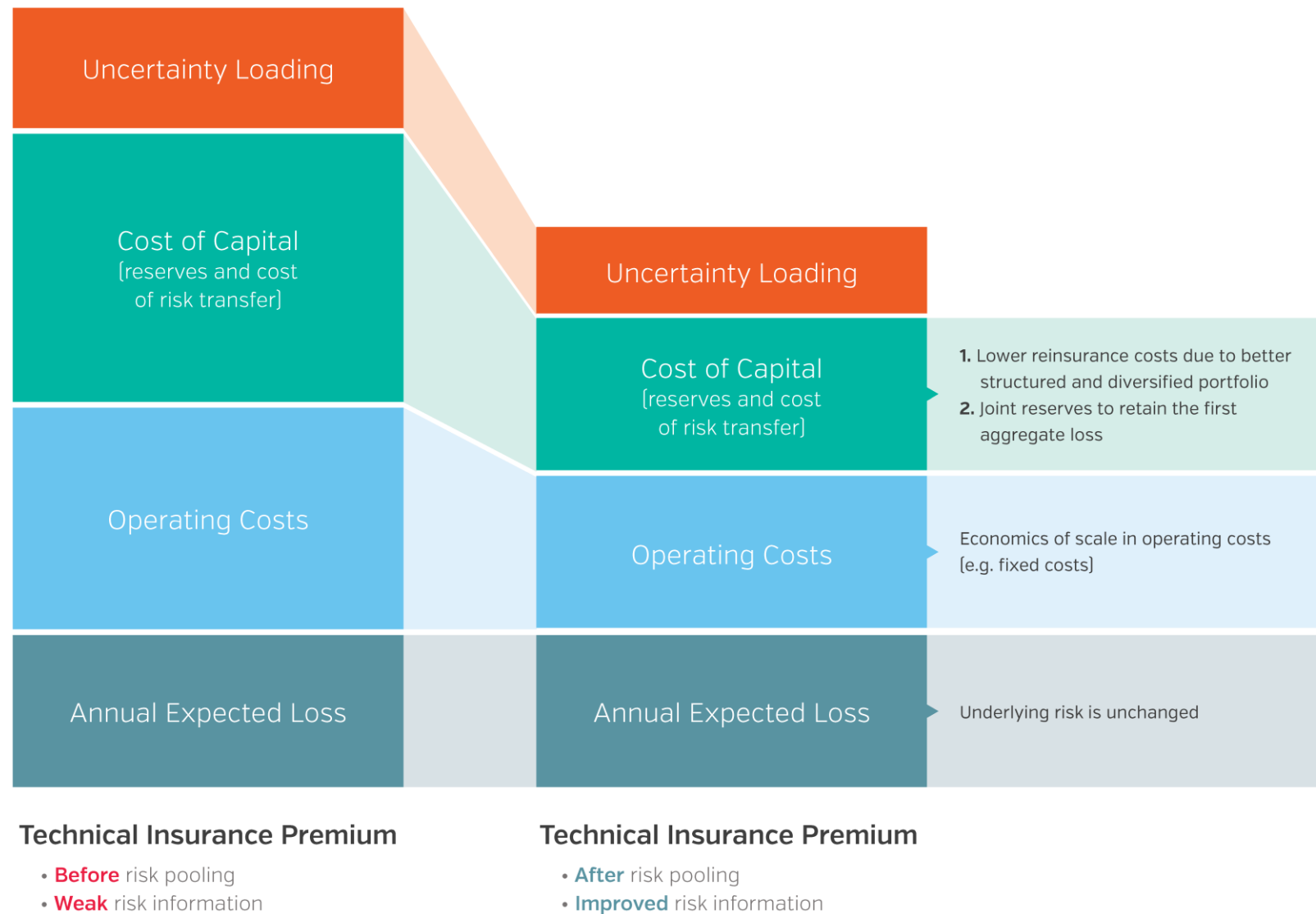


Individual country risk



Pooled risk

Small island countries can obtain better value protection



PCRAFI Payouts

2013: M8.0 Earthquake

Santa Cruz, Solomon Islands

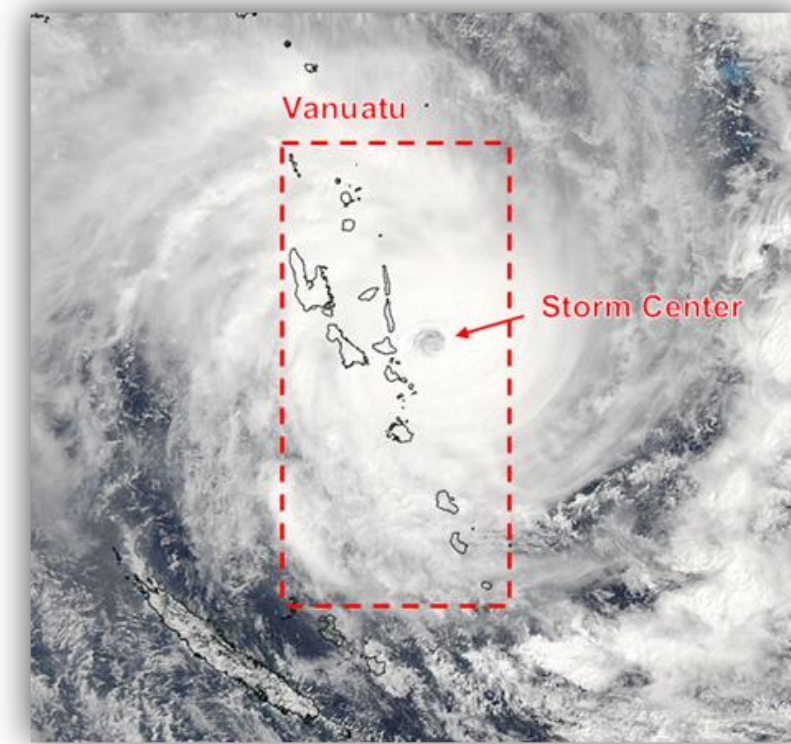
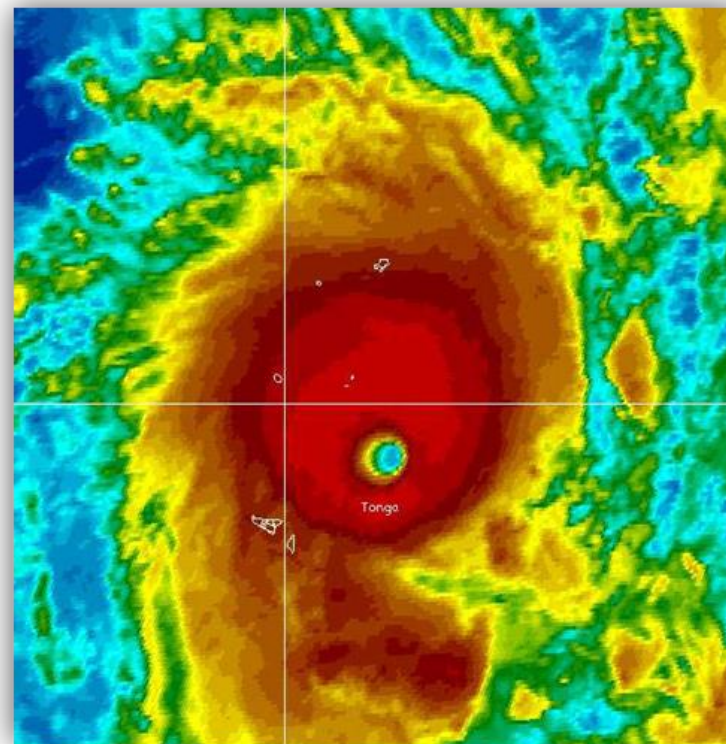
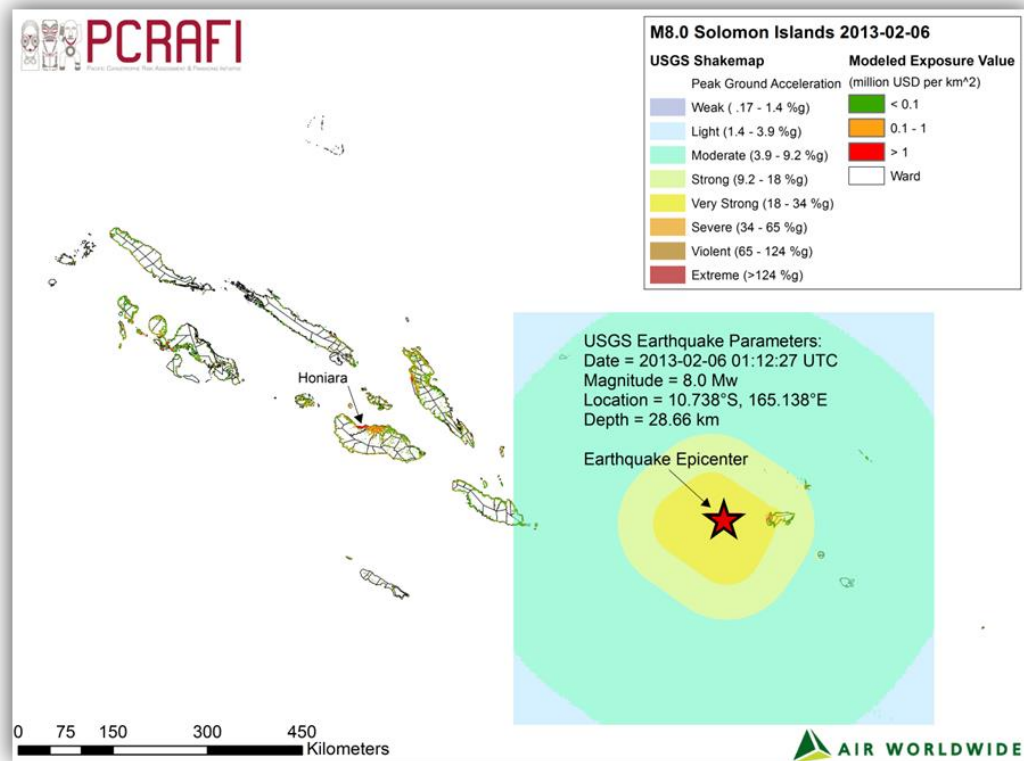
- No Payout

2014: TC Ian

- Tonga
- Payout of US\$1.27m

2015: TC Pam

- Vanuatu
- Payout of US\$1.9m



PCRAFI TA Program



Pacific Disaster Risk Financing and Insurance Workshop (2014)

The mandate of the PCRAFI TA Program is to:

- **Strengthen the institutional capacity** of the PCRAFI Facility, national and regional level organizations as well as the Ministries of Finance in order to Improve financial resilience of the PICs against natural disasters and their post disaster financial response capacity.
- **Facilitating peer exchange** across member countries and other small state islands on disaster risk financing and insurance.

Strengthening public financial management in PCRAFI member countries

PCRAFI has heavily invested in capacity building on the public financial management of natural disasters and will continue to do so. PICs have made significant progress in implementing disaster risk financing solutions.

Areas to further strengthen post disaster public financial management:

Enhance
Contingency Planning

including post disaster mobilization and reporting.

Reinforce
Legal Environment

to support the development of risk financing and insurance solutions

Enable
Risk information and risk analytics

for evidence based decision making

Strengthen countries'
Dedicated mechanisms

Developing experience and expertise to effectively allocate, disburse, and monitor recovery and reconstruction funds

WB advisory services on disaster risk finance and insurance

- ✓ FICs are offered an increasing number of financial instruments
- ✓ How to evaluate them? How to combine them?
- ✓ World Bank provides advisory services to help countries design cost-effective strategies for financial protection against climate and disaster risk

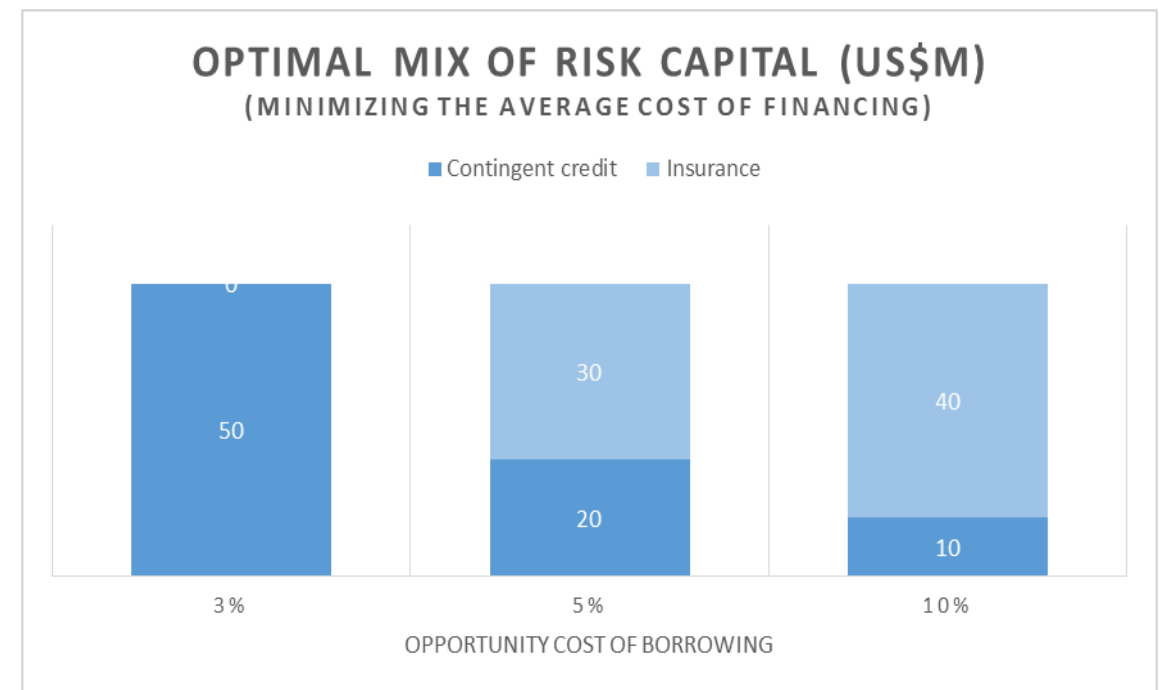
✓ Illustrative example

Rapid response financing needs

- ✓ Small disaster: US\$10M
- ✓ Medium disaster: US\$20M
- ✓ Large disaster: US\$50M

Financial instruments to secure risk capital

- ✓ Contingent credit (opportunity cost of capital)
- ✓ Insurance (premium)



Minimizing the minimum cost (no disaster): US\$50M contingent credit

Minimizing the maximum cost (large disaster): US\$50M insurance coverage

Decision Making Tool

Section 1: Insurance Strategy Selection

Inputs

Select: Total Insurance Premium	550,000
Select: Allocation of Premium to Earthquake / Tsunami	34.0%
Allocation of Premium to Tropical Cyclone	66.0%
Minimum Payout given an INSURED loss occurs	200,000

Outputs

	Strategy A		Strategy B		Strategy C	
	Earthquake / Tsunami	Tropical Cyclone	Earthquake / Tsunami	Tropical Cyclone	Earthquake / Tsunami	Tropical Cyclone
	EQTS	TC	EQTS	TC	EQTS	TC
Insurance Premium	187,000	363,000	187,000	363,000	187,000	363,000
Ceding %	24.82%	21.60%	18.77%	17.16%	14.09%	13.91%
Attachment point (years)	10	10	10	10	10	10
Exhaustion point (years) (Select: for Strategy D)	30	30	50	50	150	150
Attachment point (USD)	3,200,000	17,060,000	3,200,000	17,060,000	3,200,000	17,060,000
Exhaustion point (USD)	12,020,000	36,540,000	17,910,000	47,380,000	35,630,000	73,450,000
Coverage Limit / Maximum payout possible	2,190,000	4,210,000	2,760,000	5,200,000	4,570,000	7,840,000
Annual probability that a claim payment occurs	10%	10%	10%	10%	10%	10%
Annual probability that a claim payment occurs from at least one element of cover	19%		19%		19%	

Screenshot of the Excel simulation tool

DRF instrument mix: Vanuatu

Vanuatu uses a **combination of ex-ante and ex-post financial tools** to facilitate initial response, and these take significantly **different lengths of time to mobilize and execute**. The ex-ante instruments provide access to limited amounts of cash, and the ex-post tools can take several weeks to mobilize. Some procedures, such as the waiving of normal tendering procedures, are not embedded within the financial legislature, an omission that could significantly delay future response efforts.

EX-ANTE INSTRUMENTS / POLICIES

DISASTER RISK INSURANCE

- For high-risk layer (Earthquake, Tropical Cyclone)
- Total Catastrophe Risk Insurance Coverage: VT950M (US\$ 9.9m)
- Received US\$1.9m payout following TC Pam (2015) within 10 days of event, one of the first injections of cash to Gov.

CONTINGENCY BUDGET, NATIONAL RESERVES, ANNUAL BUDGET ALLOCATION

- For Low-risk layer (Localized Flood, Landslides)
- Contingency Budget: VT\$135m (US\$1.4m)
- Disaster Provision Funds: VT25m (US\$0.26m)

EXTERNAL DEBT

- Total Public Debt increased from 19.4% of GDP in 2010 to 21.6% of GDP in 2012
- Within total public debt, external borrowing was equivalent to 14% of GDP in 2012



Vanuatu

EX-POST INSTRUMENTS / POLICIES

BUDGET REALLOCATION

- Transfers (*virements*) within ministries must be authorized by MoF, can only be reallocated from operational budget, not personnel emoluments
- App. 34% of Vanuatu's total budget could be reallocated, amounting to VT 516.5m (US\$5.4m) in 2013

SUPPLEMENTARY

- Following state of emergency or financial emergency
- Supplementary funding of app. VT95m (US\$1m) released following TC *Vania* in 2011

DONOR FUNDING FOR RELIEF AND RECONSTRUCTION

- Government received VT18.7m (US\$195,000) in donations following TC *Vania*, equivalent to app. 13% of government funds

Key Messages

- PICs are being offered an increasing number of financial instruments for rapid response post disaster.
- Rapid response financing instruments are complementary not substitutes and should be structured to ensure comprehensive cost-effective coverage.
- Distribution mechanisms i.e. disaster linked scalable social protection should be identified to help ensure funds can reach targeted beneficiaries efficiently.
- Contingency plans enhance the ability of rapid response instruments to reach targeted beneficiaries and lead to quicker recovery.
- The private sector plays an essential role in developing additional financial tools for disaster risk finance.
- Capacity building to support decision making on rapid response financing instruments remains key.

Contact

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