



# A RANGE OF APPROACHES TO ADDRESS LOSS AND DAMAGE AT THE MACRO LEVEL:

## EXPERIENCES AND LESSONS LEARNED FROM THE CARIBBEAN CATASTROPHE RISK INSURANCE FACILITY (CCRIF)

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- Caribbean countries are highly vulnerable to natural disasters, which have caused them average losses amounting to 2% of GDP since 1970.
- Only 3% of potential loss is currently insured in developing countries vs 45% in developed countries.
- Immediate access to liquidity is critical for governments and individuals post disaster.
- Smaller nations with high debt burdens can no longer afford to self-finance disaster risk.

Vulnerability

Low Coverage

Liquidity

Debt Burden



## Losses from a selection of Major Disasters in the Last 40 Years

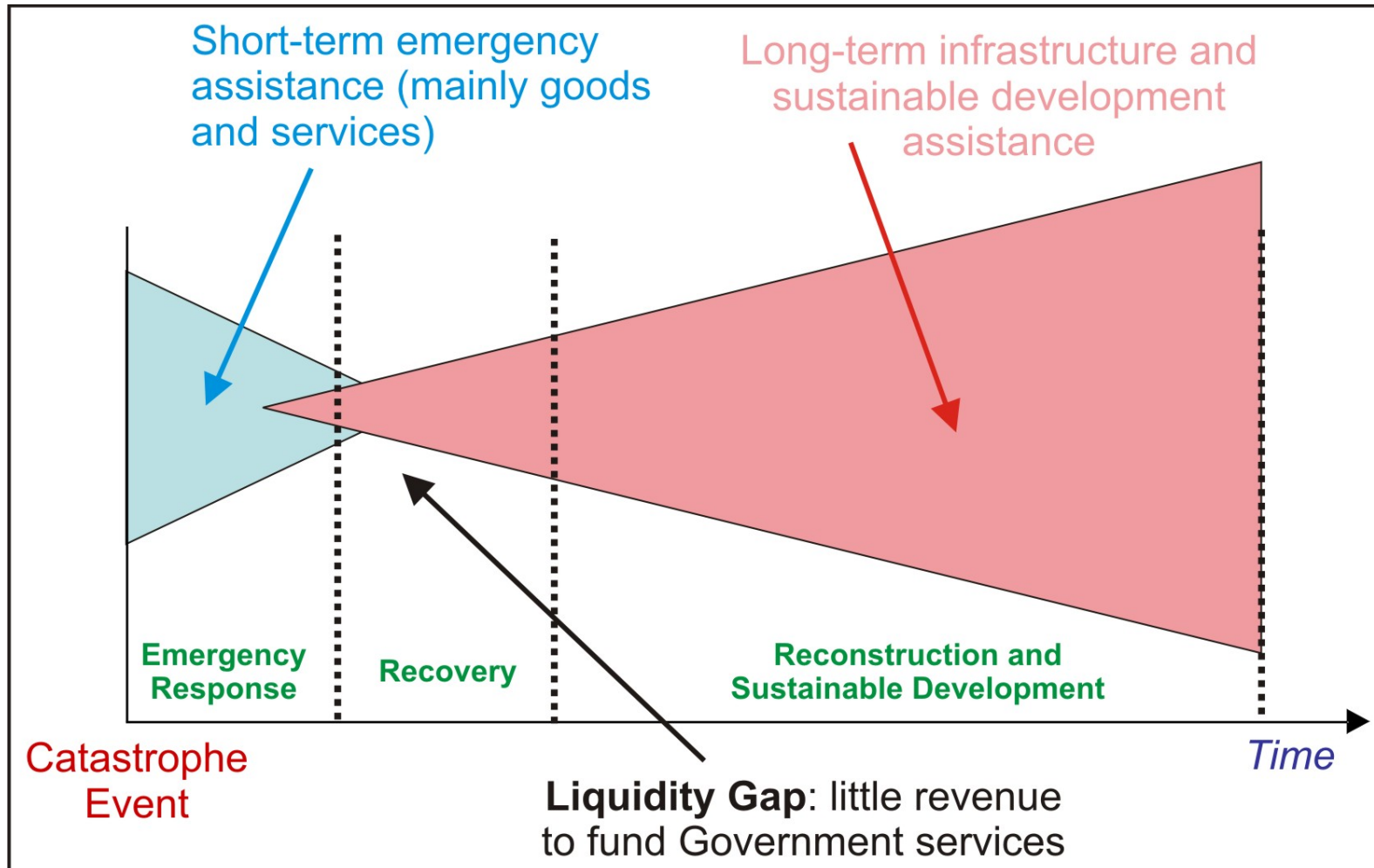
YEAR	NATURAL DISASTER	COUNTRY	REGION	ESTIMATED DIRECT LOSS (US\$ MILLION)	DIRECT LOSS (% OF GDP)
<b>LARGE ECONOMIES</b>					
1992	Hurricane Andrew	USA	North America	26,5000	0.4
1995	Earthquake	Japan	East Asia	100,000	3.2
1998	Flood	China	East Asia	30,000	0.7
2005	Hurricane Katrina	USA	North America	125,000	1.1
<b>SMALL ECONOMIES</b>					
1985	Cyclones Eric & Nigel	Vanuatu	Oceania	173	143
1990	Cyclone Ofa	Samoa	Oceania	200	178
1991	Cyclones Val & Wasa	Samoa	Oceania	278	248
2004	Hurricane Ivan	Grenada	Caribbean	889	203
2009	Tsunami	Samoa	Oceania	120	22
2010	Earthquake	Haiti	Caribbean	8,000	114

**“Financial Protection of the State against Natural Disasters”, Policy Research Working Paper 5429; Francis Ghesquiere & Olivier Mahul; the World Bank; September 2010.**



- Launched in 2007 as a public-private partnership, World Bank's response to Caribbean Governments
- World's first multi-national risk pool and the first to cover sovereign risk via parametric insurance
- Designed to offset the financial impact of hurricanes and earthquakes by providing quick liquidity
- Capitalised by donors (Canada, EU, World Bank, UK, France, Caribbean Development Bank, Ireland and Bermuda) and the **16 member governments** (via initial membership fee)







### Source of Financing Post-disaster

Instrument s	Availability of funds
Reserves	Immediate
Budget Reallocations	-
Contingent Lines of credit	Immediate
Emergency Loans	3-6 months
Donor contributions	3-6 months
Traditional Insurance	3-6 months
Parametric Insurance	Immediate
Catastrophe Bonds	Immediate



How do we combine these instruments to protect the fiscal balance of the state and improve its capacity to respond in case of a natural disaster

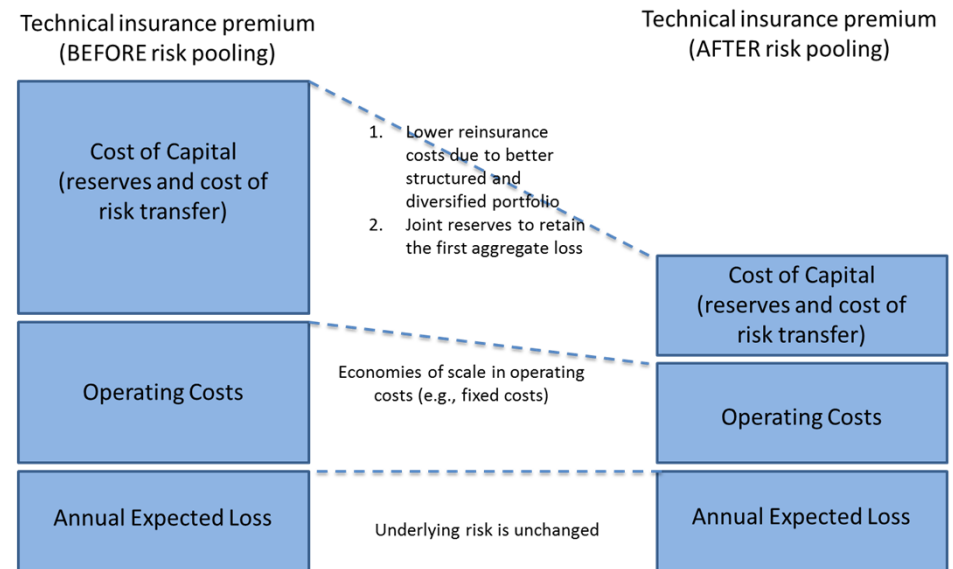


- Operates as not-for-profit
- Each government pays a premium related to the quantum of risk it transfers to the Facility
- Payouts based on the coverage conditions and the parameters of the event
- CCRIF enhances claims-paying capacity through accessing traditional and alternative risk transfer markets
- Parametric nature good fit for capital markets
- Operational/risk manager is a Caribbean-based company





- Pooling of risk across a wide geographical area provides:
  - excellent diversification
  - pooling into a single reinsurance transaction improves access to and pricing from global markets
  - parametric policies allow total objectivity/transparency and rapid payouts (14 days after an event)
- Pricing based on technical risk avoids cross-subsidisation
- Parametric insurance avoids moral hazard, so can work in full synergy with risk reduction and other tools as part of a holistic catastrophe risk management programme







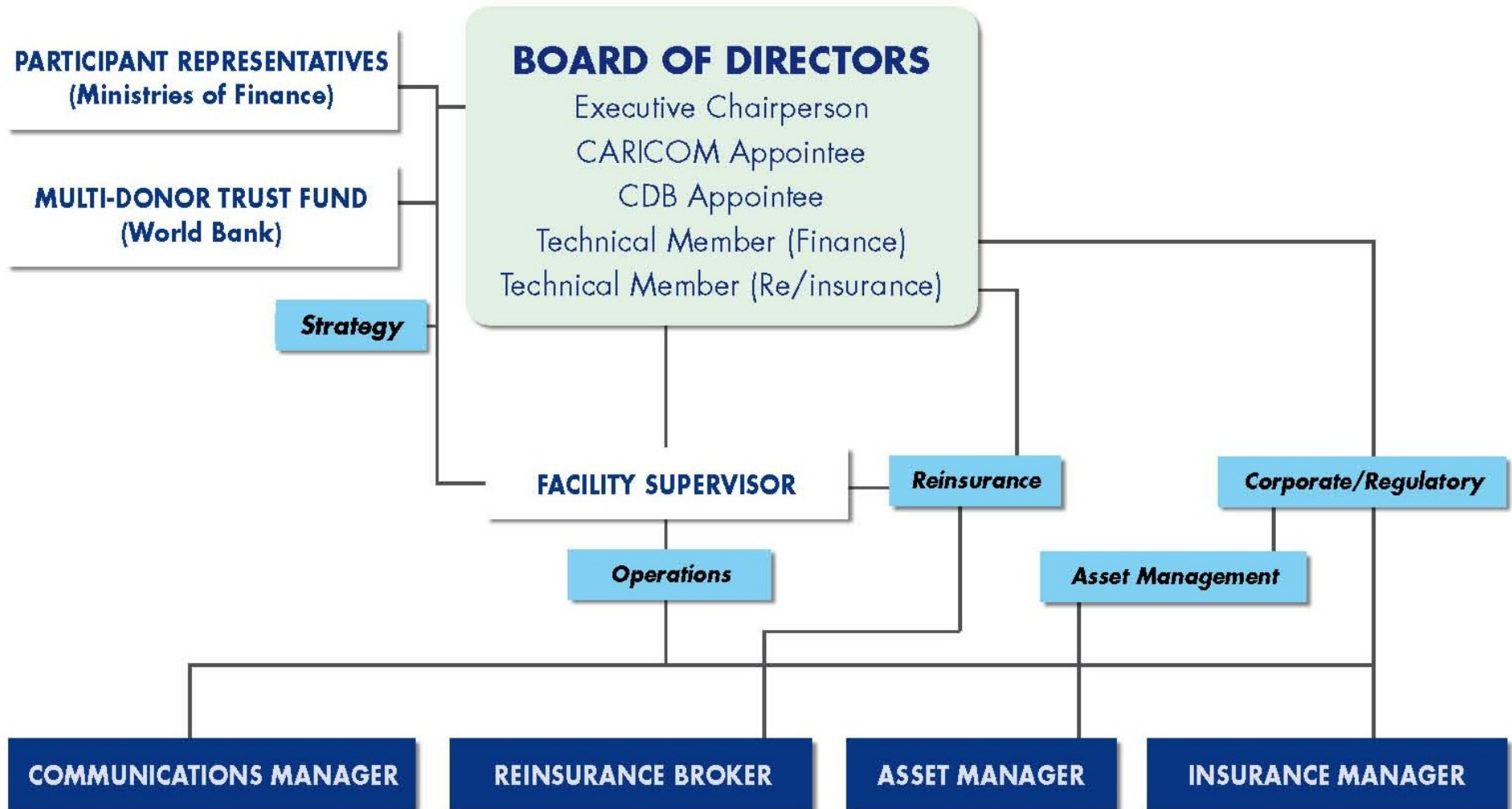
Coverage comparison	Pre-implementation estimation range	Current (actual) estimation range
<b>Hurricane</b>		
CCRIF savings vs Market	48-56%	54-59%
CCRIF savings vs Self-retention	65-71%	57-75%
<b>Earthquake</b>		
CCRIF savings vs Market	42-47%	54-62%
CCRIF savings vs Self-retention	49-53%	58-85%

*Source: Pre-implementation estimates from World Bank (2007). Achieved estimates by World Bank Disaster Risk Financing and Insurance Program, with data from Caribbean Risk Managers Ltd (2012).*





- CCRIF is a Cayman-domiciled insurance company owned by a special purpose trust
- It is governed by a trust deed, the board must ensure that the CCRIF operates within the trust's parameters
- The board has representation from participants (via CARICOM nominee) and donors (via CDB nominee), two technical experts (also nominated by CARICOM and CDB) and an Executive Chairperson
- CCRIF's operations are laid out in an Operations Manual and are executed by a number of service-provider companies (Facility Supervisor, Insurance Manager, Reinsurance Broker, Asset Manager, Communications/PR Advisor)







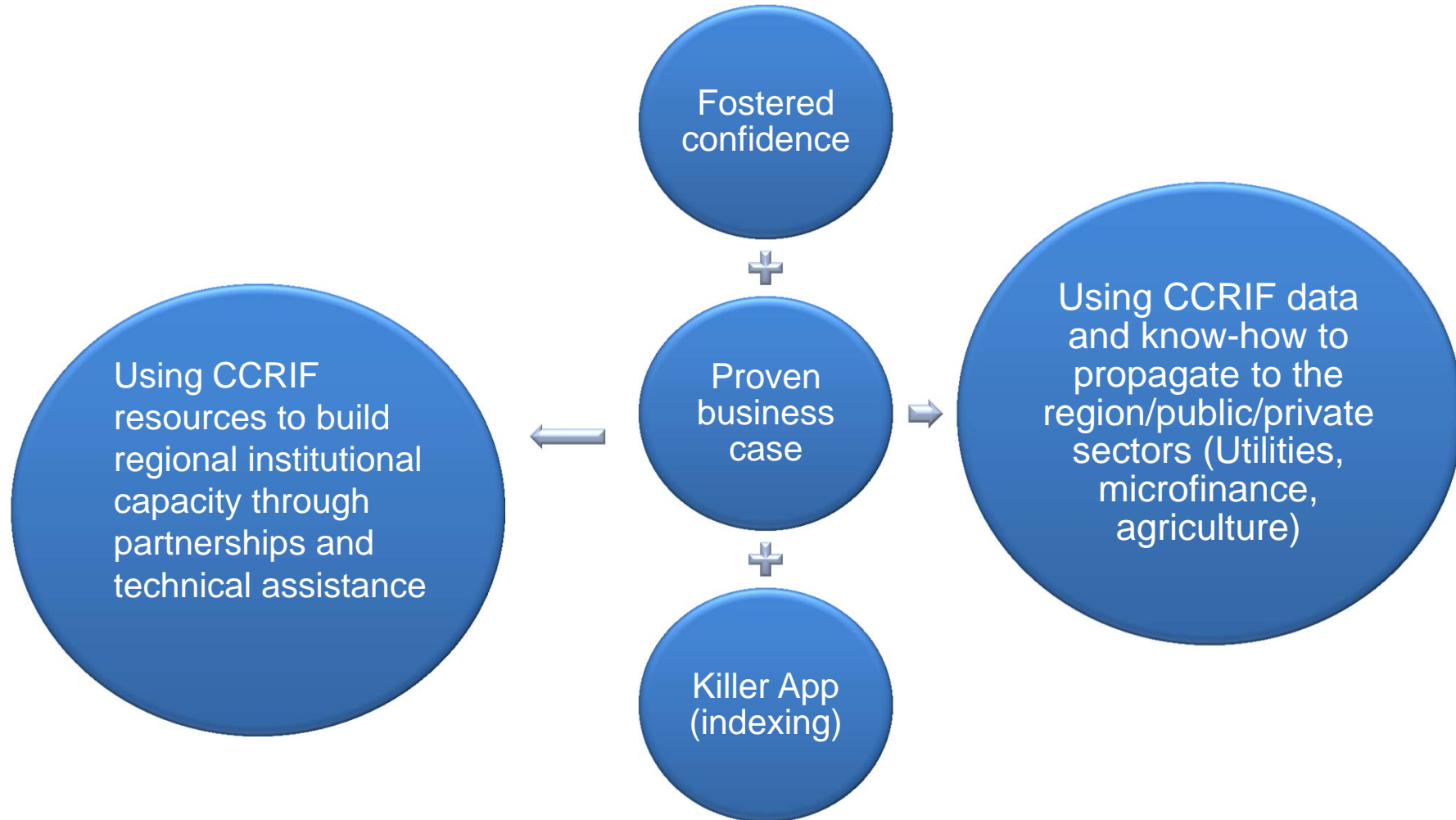
- Required constant contact with Government officials throughout process
- Many iterations of risk modelling
- Balancing donor commitments with reinsurance capacity (finding the sweet spot)
- Legal, regulatory constraints
- Breaking down the door marked “never been done before”





- Consultations with a wide range of experts and stakeholders are important in developing and successfully launching an innovative development instrument.
- Donor support can be essential for an innovative and untested development instrument.
- The private sector expertise and hands-on knowledge of relevant markets is vital to the success of a project that seeks to respond to a market failure. Local thought/leadership
- When public funds – e.g., capital contributions from donors and beneficiary governments, both ultimately provided by taxpayer – support an independently and commercially managed entity, it is important that those managing the entity have experience with stewardship of public resources.
- On-going communications with clients and other stakeholders are essential in piloting successfully an innovative development solution.
- A lean organisational structure can be very effective.
- In a highly innovative project, it is important to give the implementing agency scope for creativity and flexibility, while still ensuring compliance with operational/regulatory policies.





# CCRIF

The Caribbean Catastrophe Risk Insurance Facility

## The end



# Thank you

