

# CCRIF: Demonstrating the utility of risk pooling as a climate change adaptation tool

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- Began operation in 2007 following World Bank-led 18-month development project which in turn followed a formal request from CARICOM Heads of Government after the devastation wrought by Hurricane Ivan in September 2004.
- CCRIF is a regional catastrophe fund for Caribbean governments designed to limit the financial impact of devastating hurricanes and earthquakes by providing liquidity very quickly after a major event. Getting money fast significantly reduces the overall cost of a disaster.
- Functions like business interruption insurance against Government revenue reductions in the aftermath of major natural catastrophes; coverage is designed to cover short term revenue shortfall, NOT infrastructure, indirect social costs etc.
- CCRIF raised capital to cover claims and operating costs from donors (~US\$65M) and from its participants (~US\$22M).
- Member countries pay annual premium for coverage (\$200K to \$3M), which is priced according to the amount of risk they transfer (they chose deductible and limit from their own individualised per-peril risk profile).
- CCRIF uses a catastrophe model developed specifically for the Caribbean under its R&D programme to estimate losses in near real-time, using input data from independent bodies. The model is held in escrow by an independent third party which runs the model after an event and the model loss estimate is what CCRIF pays out against.



The Caribbean Catastrophe Risk Insurance Facility

# **CCRIF performance to date**

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#### Paid out approximately US\$33 million since its inception (3.5 years)

<ul> <li>2007 – US\$1 M to St. Lucia and Dominica</li> <li>29 November earthquake in Eastern Caribbean</li> </ul>	<b>2010 - US\$4.2 M to Anguilla</b> Hurricane Earl (September)
2008 – US\$6.3 M to the Turks & Caicos Islands Hurricane Ike	<b>2010 - ~US\$8.5M to Barbados</b> Hurricane Tomas (October)
<ul> <li>2010 – US\$7.75 M to Haiti         <ul> <li>12 January earthquake</li> <li>The first set of funds to be received by the</li> <li>Government of Haiti inclusive of all pledges, regional and international</li> <li>Represented perhaps 50% of the TOTAL aid</li> <li>Government of Haiti received in first 10 weeks in the form of direct liquidity</li> </ul> </li> </ul>	2010 - ~US\$3.2M to ST. Lucia Hurricane Tomas (October)
	2010 - ~US\$1.1M to St. Vincent and the Grenadines Hurricane Tomas (October)

#### Strong proof of concept



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## **Benefits and limitations**

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Benefits	Limitations
<ul> <li>Pooling of risk across wide geographical area provides         <ul> <li>excellent diversification</li> <li>access to coverage previously unavailable</li> </ul> </li> <li>Pooling into single reinsurance transaction         <ul> <li>improves access to and pricing from global markets</li> <li>allows innovative structures</li> </ul> </li> <li>Parametric policies allow total objectivity and rapid payouts</li> </ul>	<ul> <li>High deductible - only covers major catastrophe events in which national economies are severely impacted</li> <li>Basis risk means that events can occur which produce significant losses but no payout (and the opposite is possible)</li> <li>Concept of parametric insurance is poorly understood, so there is a need to manage expectations that CCRIF insurance is a panacea</li> <li>Parametric insurance can be difficult to explain and understand which can lead to challenges</li> </ul>
<ul> <li>Pricing based on technical risk avoids cross- subsidisation</li> <li>Payout is quick because the parameters of the hazard are known immediately after the event</li> <li>The loss amount is calculated entirely objectively using a model defined in the insurance policy</li> <li>The technical risk on an insurance contract is better defined because there are fewer uncertain variables. This provides greater opportunity for risk transfer to capital markets</li> </ul>	

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- Apart from assisting in the recovery and reconstruction process through provision of liquidity, CCRIF is also engaged in the following:
  - Facilitating the implementation of risk management activities that reduce risk and heighten resilience (sponsorship of conferences, workshops, scholarships, professional development)
  - Promoting risk assessment and risk management tools (*e.g.* Real Time Forecasting System, CIMH rainfall forecasting)
  - Involved in the design of suitable index-based or hybrid products at sub-national level either directly or via community-based partners
  - Also extending support to critical institutions which are key to informing this process – through MoUs, project partnerships and Technical Assistance Programme

