

Innovative insurance solutions to support sustainable development: Examples from the Caribbean



Pacific Regional Capacity Building Workshop on Improving Access to Finance for the Agricultural Sector

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CaribRM Risk Managers To The Caribbean A member of CCM Gallagher GROUP Reinsurers of the Caribbean

Presentation format

- Caribbean Context
- CCRIF overview and background
- CCRIF performance to date
- BMU/MCII project
- MiCRO
- Conclusion

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Caribbean Context

- Caribbean countries are highly vulnerable to natural disasters, - 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 post-disaster
- Smaller nations with high debt burdens cannot afford to self-finance disaster risk

Vulnerability

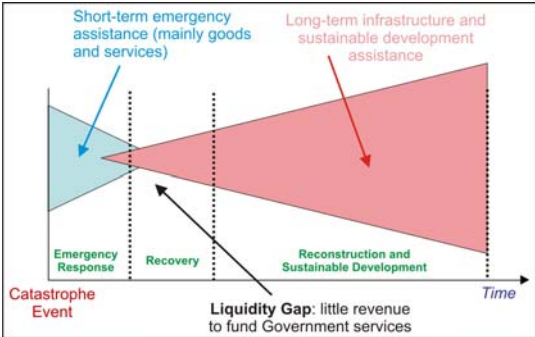
Low Coverage

Liquidity

Debt Burden

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Liquidity Gap



Short-term emergency assistance (mainly goods and services)

Long-term infrastructure and sustainable development assistance

Emergency Response

Recovery

Reconstruction and Sustainable Development

Catastrophe Event

Liquidity Gap: little revenue to fund Government services

Time

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CCRIF - History

- Pooled re/insurance solution for Caribbean governments first called for by CARICOM Working Party on Insurance after Hurricane Andrew ('92)
- Andrew resulted in US\$250 million in damage in Bahamas alone
- Revived in 2004, after Hurricane Ivan inflicted almost 200% of GDP damage on Grenada and the Cayman Islands
- All parties identified the high exposure of small island economies across the region to natural hazards, and the consequential risk to sustainable development
- CARICOM Heads of Government asked the World Bank to assist in designing and implementing a cost-effective risk transfer programme for member governments






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What is CCRIF?


- 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
- Functions like business interruption insurance against Government revenue reductions in the aftermath of major natural catastrophes
- Capitalised by donors and participants (via a membership fee). CCRIF initially raised capital to cover claims and operating costs from donors (~US\$50M) and from its participants (~US\$22M). Donor capital eventually reached ~US\$67M
- Claims paying capacity is greater than the modelled aggregate annual loss with a 1 in 10,000 chance of occurring
- Uses a pre-agreed catastrophe risk model and public-domain input data to estimate government losses immediately after an event, and payment is made against those estimated losses without the need for slow and costly on-the-ground loss adjustment



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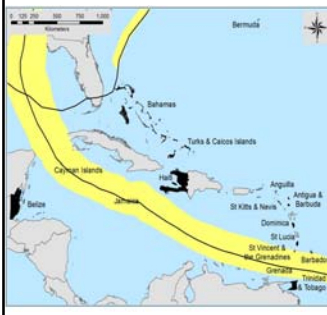
Cost effectiveness

- CCRIF combines multiple design factors to reduce premium costs to clients:
 - Parametric product; you get what you pay for in terms of transfer of risk
 - Risk pooling value is passed directly to member countries
 - Reinsurers give good pricing for developing-world risk nicely packaged (plus capital allows for flexibility in buying reinsurance)
 - Virtual entity with low fixed costs and no shareholders requiring dividends




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Value of Pooling



Aggregate Limits \$624,427,000	CCRIF Value of Pooling 2011-12 Portfolio 1,000-yr return is 22.8% of Aggregate Limit
1,000-yr loss \$142,896,000	



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CCRIF performance to date

- CCRIF has paid out approximately US\$32 million since its inception
 - 2007 – ~US\$1 M between St. Lucia and Dominica
 - 29 November earthquake in Eastern Caribbean
 - 2008 – US\$6.3 M to the Turks & Caicos Islands
 - Hurricane Ike
 - 2010 – US\$7.75 M to Haiti
 - 12 January earthquake
 - The first set of funds to be received by the Government of Haiti inclusive of all pledges, regional and international
 - 2010 - US\$4.2 M to Anguilla,
 - Hurricane Earl (September)
 - 2010 – US\$12.8 M between Barbados, St. Lucia and St. Vincent
 - Hurricane Tomas (October)



CCRIF R&D - MCII project

- MCII in partnership with CCRIF, MicroEnsure and Munich Re, has received support from the German Government to undertake the project - *“Regional Institutions, Adaptation and Insurance: Expanding Coverage for Medium Level Weather Extremes in Vulnerable Countries Using Risk Reduction and Innovative Insurance Solutions”*
- Sponsored by the International Climate Change Initiative (IKI) of the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU)
- Exploring the potential role of CCRIF as a facilitator of meso- and micro-level index insurance solutions as a part of climate change adaptation, with the results feeding directly into the ongoing negotiations for a global climate treaty (which includes provisions for regional risk pools modelled on CCRIF)



MCII Project

- Linking insurance products to disaster risk reduction is key aspect of project
 - Link to early warning systems
 - Provide DRR advice
 - Reward DRR
- Act as a lighthouse project to demonstrate use of insurance instruments at micro-level, and link to regional risk pool (CCRIF)



MCII project

- We hope to be develop, test, and implement up to three products in the Caribbean. These might include:
 - a pure weather hedge (small scale farmers and day laborers);
 - weather index insurance facilitating access to credit (multi-cropping small scale farmers); and
 - lender-portfolio level insurance product working with microfinance/agricultural banks and other financial institutions that cater to low-income groups.
- Aiming to launch one or more products in some or all of Belize, Guyana, Jamaica, Grenada and Saint Lucia

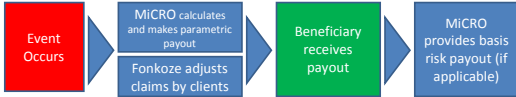
MiCRO – an innovative catastrophe microinsurance programme

- The powerful earthquake that affected Haiti on 12 January 2010 had a major impact on the micro-finance sector, as had previous natural catastrophe events such as the 2008 floods
- CaribRM was asked by DFID to work on a solution to reduce the impacts of natural catastrophes on both the micro-finance institutions themselves and their clients
- The resulting platform, Microinsurance Catastrophe Risk Organisation (MiCRO), provides the financial tools through which small scale entrepreneurs and farmers who are using micro-credit to help lift themselves out of poverty can protect themselves against the vagaries of natural hazards

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MiCRO client programme

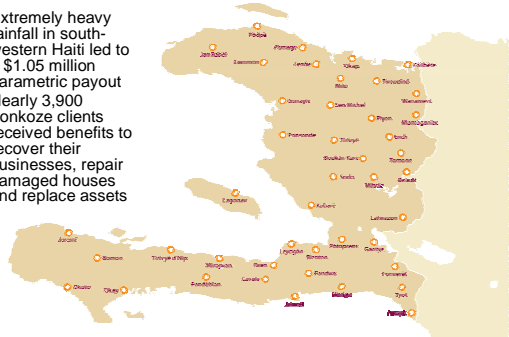
- All of Fonkoze's group-lending clients are covered by obligatory catastrophe insurance, which protects each client if their means of doing business is destroyed by a natural catastrophe event
- When a rain, wind or earthquake event occurs, clients submit their claims through their Solidarity centers
- Qualifying losses provide the following payout:
 - Reimbursement of the client's existing Fonkoze loan balance
 - A 5,000 HTG (~US\$125) cash payment
 - A new loan to recapitalize their business when the client is ready



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Performance to date

- Extremely heavy rainfall in south-western Haiti led to a \$1.05 million parametric payout
- Nearly 3,900 Fonkoze clients received benefits to recover their businesses, repair damaged houses and replace assets



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Conclusion

- There are many similarities between the Caribbean and the Fiji islands with regards to geographic composition and hazard exposure and therefore a parametric product could be beneficial to the agricultural sector
- 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
- 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

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THE END

THANK YOU