Several CCRIF participating countries have expressed a strong interest in being able to contract for catastrophic flood coverage. In response, the CCRIF engaged the Caribbean Institute for Meteorology and Hydrology (CIMH) to conduct a study of the adequacy of existing rainfall and flooding data in the region for the purpose of supporting flood insurance. The study analyzed the quality and extent of existing data, and attempted to link relevant data sets to selected historic flood events. The main conclusion of the study was that the database is presently insufficient to develop hydrologic basin flood models needed for producing flooding probabilities, and that an alternative approach, likely to be based on excess rainfall, holds the best promise for a workable flood risk insurance in the short term.

CCrif has contracted with CIMH and KAC to develop and test a parametric excess rainfall insurance product. The excess rainfall model will use the same platform as developed for the second generation Hurricane and Earthquake Hazard and Loss Estimation Model. A proof of concept has been completed, and comprehensive testing of the concept will be undertaken over the coming month, alongside outreach activities designed to ensure client feedback and reinsurer familiarity.

Principal steps in developing an excess rain parametric insurance product

- Develop a system, to be housed by CIMH, that monitors real-time events and collects the same data from which real-time rainfall rates can be delivered.
- Produce an index that represents rainfall amounts over time periods that can serve as proxy for flooding risk in CCRIF countries. These periods would vary from short (6 to 24 hours) for areas subject to flash flooding, to long periods (several days to weeks) for areas subject to river basin and delta flooding.
- Consult with countries about the areas (key basins with significant flooding risk) that are considered for flood risk coverage, and develop insurance contracts.
- Compute historic rainfall probabilities from the Global Forecast System Initialization database. This is a reliable, open access database, compiled by NOAA for WMO that integrates data collected by all national meteorological offices in the Caribbean.

Contact Caribbean Risk Managers Ltd, Facility Supervisor
Barbados: +1 246 426-1525,
Jamaica: +1 876 920 4182,
USA: +1 202 465 4301
Email: ccrif@ccrif.org
The CCRIF is the first multi-country risk pool in the world, and is also the first insurance instrument to successfully back a parametric policy backed by both traditional and capital markets. It is a regional insurance fund for Caribbean governments, designed to limit the financial impact of catastrophic hurricanes and earthquakes by quickly providing financial liquidity when a policy is triggered.

Sixteen governments are members of the Fund: Anguilla, Antigua & Barbuda, Bahamas, Barbados, Belize, Bermuda, Cayman Islands, Dominica, Grenada, Haiti, Jamaica, St. Kitts & Nevis, St. Lucia, St. Vincent & the Grenadines, Trinidad & Tobago and the Turks and Caicos Islands. Last year the CCRIF paid out approximately USD 3M to Turks and Caicos in the aftermath of Hurricane Ike.

Promoting effective country risk management programs. CCRIF has come on a critical time for developing countries, faced with growing exposure to hydro-meteorological risks as climate change signals become stronger. Risk management and risk transfer through innovative pooling arrangements, such as CCRIF, will form an important part of the UNFCCC Copenhagen Conference discussions and resulting treaty. Ex-ante funding for the increasing costs of disaster relief and recovery in the developing world through catastrophic insurance mechanisms, is key to a significant part of the adaptation framework in the Copenhagen Agreement. The Caribbean nations, particularly exposed to natural hazards and particularly lacking in financial capacity, put a unique position on the CCRIF using cost-effective risk transfer as part of their holistic risk management adaptation.

CCrif to introduce real-time loss model

CCrif announces the introduction of its second generation loss model that will be used to underwrite hurricane and earthquake risk, which will enable CCRIF to offer new coverage types. Depending on the results of testing and validation over the coming months, a new rainfall product should be available either in late 2009 or at the start of 2010.

With this model, the CCRIF will be better able to meet the catastrophe insurance needs of its Caribbean government clients, to offer additional products beyond hurricane and earthquake coverage, and to expand beyond the present number of clients.

The new model reduces the ‘basis risk,’ inherent in the loss indexing approach used in the first generation model. Since the second generation model is built on techniques published in the scientific literature, it promotes a better understanding of the loss modelling process. And most importantly, it supports CCRIF’s quest to provide a more open environment to assist Caribbean institutions, such as the University of the West Indies, in developing a regional hazard and risk assessment and mapping capability in support of improved natural hazard risk management in the region.

The second generation loss model was developed by Kinetic Analysis Corporation (KAC), a firm that was part of the consortium contracted by the World Bank to develop the financial and operational strategy for the CCRIF. KAC has extensive experience in natural hazard and risk assessment in the Caribbean, experience gained from being the lead consultant on the Caribbean Disaster Mitigation Project (CDMP) in the late 90’s. Their approach, which uses modules based on public-domain data and peer-reviewed science, meets the transparency goals of the CCRIF.

The Facility is provided with loss index curves for each territory from the USGS seismic policy guiding and event payouts. The Facility is provided with a stand-alone risk transfer. The Facility is provided with a stand-alone risk transfer. The Facility is provided with a stand-alone risk transfer. The Facility is provided with a stand-alone risk transfer. The Facility is provided with a stand-alone risk transfer. The Facility is provided with a stand-alone risk transfer. The Facility is provided with a stand-alone risk transfer.