

The Caribbean Catastrophe Risk Insurance Facility

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WS CCRIF, a not-for-profit company, is the first and only multi-country parametric risk pool in the world

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CCRIF APPOINTS FIRST FULL-TIME CEO

The Chairman of the Board of the Caribbean Catastrophe Risk Insurance Facility (CCRIF), Mr Milo Pearson recently announced the appointment of Mr Isaac Anthony from Saint Lucia as the Facility's first full-time Chief Executive Officer, effective from January 1, 2013.

Prior to this appointment Mr Anthony served as Permanent Secretary, Planning and National Development in the Government of Saint Lucia. He also has served his country in key positions such as Accountant General, Registrar of Insurance, Director of Finance and Permanent Secretary, Finance. He has served as a CCRIF board member appointed by CARICOM for the past 5 years. He brings many years' experience as a senior finance and planning official with the Government of Saint Lucia coupled with service on the boards of key regional financial institutions such as the Caribbean Development Bank and the Eastern Caribbean Central Bank – all of which have provided a bedrock of expertise and experience to function effectively in the role of CCRIF's CEO. Mr Anthony is a product of the University of the West Indies, having graduated from that institution with a Bachelor of Science degree in Economics and Accounting (double major) and an MBA.

Mr Pearson states, "Mr Anthony brings invaluable experience and insight to this new position, which has been created to address both decision making and governance with a focus on high-quality internal controls to enhance efficiencies and to

reduce the risk of business interruption. This is a big part of our efforts to strengthen the sustainability of CCRIF as it becomes a more mature Caribbean institution." The recruitment process for a new CEO began early in 2012 with the post being advertised both regionally and internationally.



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One of the first responsibilities of Mr Anthony when he assumes office will be to meet with government agencies, including ministries of finance, across the region towards strengthening their relationship with CCRIF and to continue discussions regarding the new excess rainfall product. The CEO will provide strategic guidance to the members of the CCRIF team and will further explore how the Facility can support capacity development in the region through its technical assistance programme.

Mr Anthony welcomes the challenge of this new position and says, "I am very excited to be appointed the first full-time Chief Executive Officer of CCRIF. Having actively collaborated over the years with ministries of finance and planning in the region, donor agencies and other stakeholders, I look forward to working with them in building on the successes of CCRIF and in strengthening disaster risk management in the Caribbean."

Feature Article: CCRIF Contributes to Building Regional Capacity in Catastrophe Risk Management

This article presents the ways in which CCRIF has been contributing to building regional capacity in catastrophe risk management through the implementation of its technical assistance programme, which has been designed to "assist Caribbean governments and their communities in understanding and reducing the socio-economic and environmental impacts of natural catastrophes, whilst at the same time contributing to the long-term sustainable development of the Region."

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CCRIF Signs Memorandum of Understanding to Strengthen the Evaluation and Mitigation of Seismic Risk Across the Region

The Caribbean Catastrophe Risk Insurance Facility (CCRIF) and the Seismic Research Centre (SRC) of the University of the West Indies have entered into a partnership to enhance the Accelerometric Network in the Eastern Caribbean and Jamaica in order to strengthen the evaluation and mitigation of seismic risk across the region. In April of 2012, the two organisations signed a Memorandum of Understanding and entered into a cooperative agreement to implement this two-year project which will cost ~US\$235,000 – with US\$120,000 provided by CCRIF and the remainder provided by SRC.

Currently there are 50 seismic stations in the entire SRC network. Under this partnership there will be the installation of twelve additional strong motion instruments in seven countries (Grenada, Barbados, Saint Lucia, Dominica, Antigua & Barbuda, St Kitts & Nevis, and Jamaica) to extend the existing accelerometer network in the Caribbean, some components of which are part of regional tsunami surveillance efforts. These new instrument stations will increase regional coverage and focus on "hot spots" in the Eastern Caribbean and Jamaica. Additionally, these strong motion instruments will complement the SRC's existing weak motion network, which was initially established in the 1950s to gather data to help understand spatial and temporal characteristics of earthquakes. Strong motion data are used to undertake more in-depth analysis to inform earthquake hazard assessments. This analysis can be used to determine areas at risk and inform disaster preparedness decision making.

This partnership also will focus on building the data and knowledge bases in the region and on disseminating data to professionals in the disaster management, construction and engineering community throughout the region. A key activity will be the production of an annual catalogue in digital format of the data collected by the network, which will be made available through the SRC website.



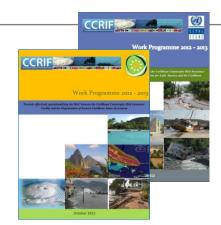
While hurricanes are a wellknown and dangerous threat to the Caribbean, this initiative is invaluable to the region since these countries are also vulnerable to earthquakes, volcanic eruptions and tsunamis. The Eastern Caribbean is a seismically active area with hundreds of earthquakes occurring in and around the region each year – although not all of these earthquakes are felt. In Jamaica there is a well-known history of destructive earthquakes with about 200 earthquakes located in and around the island per year. No island in the region is completely free from the threat of earthquakes.

World Bank Implementation Completion and Results Report on CCRIF



In July 2012, the World Bank published its Implementation Completion and Results Report (ICR) on CCRIF's performance. In 2007, the World Bank had established a Multi-Donor Trust Fund (MDTF) to support the operations of CCRIF and as planned, CCRIF drew down on the final funds from the MDTF early in 2012. The ICR acts as the wrap-up report from the World Bank to the MDTF donors. The ICR documents the results achieved and lessons learned and assesses the Facility's performance, highlighting critical success factors. In terms of achievement of the project development outcomes and CCRIF's performance, the ICR reports a rating of Highly Satisfactory, which is the Bank's highest possible rating. The Bank's rating was based on CCRIF's demonstrated ability to enable Caribbean governments to transfer a portion of their hurricane and earthquake risk to the Facility at the lowest possible price and to provide prompt cash payouts, all within a couple of weeks following a covered event. The report states that CCRIF had outperformed the original estimates of the cost savings that it initially had hoped to provide. Furthermore, it states that the Facility was highly efficient and that its claims paying capacity greatly exceeded expectations.

CCRIF to Begin Work with two Regional Organisations towards Building Regional Capacity in Hazard Risk Reduction



Between June and November 2012, CCRIF began working with the Organisation of Eastern Caribbean States (OECS) and UN-Commission for Latin America and the Caribbean (UN-ECLAC) towards developing work plans to effectively operationalise the memorandum of understanding that CCRIF has with each of the these organisations. These MoUs have been developed towards assisting the governments of Caribbean states to adopt policies on disaster risk reduction and mitigation that minimise the socio-economic, physical and environmental damages caused by natural disasters.

Brief on the Work Plan between CCRIF and UN-ECLAC

Under this work programme, two main activities will be pursued. These are:

- Evaluation of Post-Disaster Assessments this activity will involve the conduct of an assessment of the postdisaster recovery and development processes undertaken in the Caribbean over the past six years. This will include an assessment of the region's resilience and risk reduction initiatives, as well as the extent to which recovery efforts have closed the damage and loss gaps estimated by ECLAC consequent upon the impact of the natural hazard.
- Linking the DaLA to the PDNA this will provide an assessment of strategies for linking of ECLAC's Damage and Loss Assessment (DaLA) methodology to the Post Disaster Needs Assessment (PDNA) as a means of strengthening both approaches. The DaLA methodology is used for estimating the socio-economic and environmental effects of disasters. The methodology is based on a stock-flow analysis of the difference before and after an event. Through a sectoral approach, it provides guidelines for the aggregation of value (damage and losses), to be used in the evaluation following an event. It is a basic accounting approach based on the national account framework and impact multipliers in the economy. The PDNA is the first response to a disaster and aims at providing a human recovery needs assessment. It typically includes the recovery and reconstruction framework that guides the post-disaster recovery strategy immediately after a disaster.

These activities will be undertaken between January and September 2013 at a total cost of US\$51,000.

Brief on the Work Programme between CCRIF and the OECS

The activities to be implemented under this work programme will build the capacity of the OECS Secretariat and member states in reducing their vulnerabilities to natural hazards. These activities are:

- Developing the capacity of the OECS Secretariat and member states in the use of forecasting tools such as the use of the CCRIF Real-time Forecasting System (RTFS)
- Supporting country-level risk awareness in the National Disaster Offices, Ministries of Finance and Ministries of Planning in the OECS member countries with a particular focus on holistic risk management and quantification of risk. This will also include the promotion of Country Risk Officer (CRO) concepts – including holding sensitisation sessions on the CRO concept
- Implementation of the Multi-Hazard Risk Reduction Methodology for vulnerable and low-income communities by applying the Community Disaster Risk Reduction Model (CDRR) Framework in selected member state(s) to identify, rank and prioritise vulnerable communities for mitigation measures; and preparation of a work plan for providing assistance to the target communities in the development of disaster management action plans and associated budgets. The CDRR Framework and the Multi-hazard Risk Reduction methodology are instruments developed for the OECS Secretariat in support of multi-hazard risk reduction in lowincome communities through an identification and prioritisation of vulnerable communities and subsequent development of community action plans.

These activities will be completed by August 2013 at a total cost of US\$32,000.

CCRIF has MoUs with the following organisations:

- Caribbean Community Climate Change Centre (CCCCC)
- Caribbean Disaster Emergency Management Agency (CDEMA)
- Caribbean Institute for Meteorology and Hydrology (CIMH)
- Organisation of Eastern Caribbean States (OECS)
- United Nations Economic Commission for Latin America and the Caribbean (UN-ECLAC)
- University of the West Indies Seismic Research Centre (UWI-SRC)

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CCRIF Contributes to Building Regional Capacity in Catastrophe Risk Management

In 2009, the Caribbean Catastrophe Risk Insurance Facility (CCRIF) launched its Technical Assistance Programme. This Programme consists of three components and is designed to provide an on-going mechanism for grant support within the Caribbean region for capacity building initiatives and the development and implementation of projects which have a strong potential for improving the effectiveness of disaster risk management. The Programme aims to help Caribbean countries deepen their understanding of natural hazards and catastrophe risk, and the potential impacts of climate change on the region.

The three components of the technical assistance programme are:

- A Scholarship/Professional Development Programme which supports scholarships for bachelors and masters degree programmes and for professional development programmes
- Regional Knowledge Building which focuses on creating partnerships with regional organisations towards supporting a range of projects in natural hazards and risk
- Support for Local DRM Initiatives which is intended to provide support for national disaster committees, nongovernmental organisations and other community-based organisations in local hazard risk management and climate change initiatives

As part of the Scholarship/Professional Development component, CCRIF has awarded fourteen scholarships between 2010 and today either through its Extra-Regional Scholarship Programme, its University of the West Indies (UWI)-CCRIF scholarship programme or as part of its cooperation with member countries and regional organisations. Total disbursements to date are in excess of US\$210,000.

CCRIF launched its scholarship programme with UWI in 2010 and since then the Facility has provided a total of eleven scholarships to students at the Mona (Jamaica) and St Augustine (Trinidad & Tobago) campuses of the University. CCRIF provides three scholarships each year for the one-year disaster management masters degree offered at the Mona Campus and two two-year scholarships for students entering their second of three years in the Geography/Geology degree programme (Mona Campus) or Civil with Environmental Engineering degree programme (St Augustine Campus). The total value of awards disbursed in this category to date is US\$105,250. Another three masters-level students will receive scholarships in the 2012/13 academic year.

In February 2012, CCRIF launched its Extra-Regional Scholarship Programme. Ms Annlyn McPhie and Mr Mahendra Saywack were the scholarship recipients for 2012 under this programme. Ms McPhie will pursue a Master of Public Administration degree in Environmental Science and Policy at Columbia University, USA and Mr Saywack will complete a Master of Science degree in Climate Change and Development at the University of Sussex, UK. The value of these two scholarships totals in excess of US\$99,000.

The extra-regional scholarships will be offered annually to CARICOM nationals who are desirous of pursuing a Masters or MBA degree in areas related to catastrophe risk management at a university in the United Kingdom, United States or Canada. Eligible programmes include masters-level courses in the following areas:

- Catastrophe Risk Management
- Property/Casualty Insurance
- Disaster Management
- Meteorology/Climate Change
- Engineering (Civil/Environmental/Building with disaster focus)

Prior to the official launch of the extra-regional scholarship programme, CCRIF, in 2011, provided a grant of £10,000 to Ms

CARIBBEAN CATASTROPHE RISK INSURANCE FACILITY

Wazita Scott of the Caribbean Institute for Meteorology and Hydrology (CIMH) to attend Reading University in the UK to pursue a Master of Science degree in Atmosphere, Ocean and Climate. The scholarship was provided as part of the terms of a Memorandum of Understanding between CIMH and CCRIF.

Support also is provided to regional and member government institutions from time to time to build capacity of key individuals to fulfil their mandates related to catastrophe and disaster risk management. Notable examples of this assistance are awards provided by CCRIF in 2011 to two individuals employed to Belize's National Meteorological Service to allow them to study for a Bachelor of Science degree in Meteorology at the University of West Indies, Cave Hill Campus, Barbados.

Over the years CCRIF also has provided support to individuals and organisations to engage in professional development opportunities. Some of this support has included: a grant of US\$5,000 provided to Winston Gall, meteorological technician with the Cayman Islands Airport Authority, to further his studies in Meteorology at the Graduate



Photo shows Ms Wazita Scott conversing with Dr Warren Smith, then Board Member of CCRIF, at his office at the Caribbean Development Bank in August 2010. At that meeting, Dr Smith presented Ms Scott with her scholarship.

School of the US Department of Agriculture; and support to Andrea Sealy of the CIMH to participate in the International Training Course on Satellite Meteorology held in Beijing, China in June 2010.

Additionally, over the period 2011 to 2012, CCRIF developed and delivered an online training course in understanding and using its Real-Time Forecasting System (RTFS). To date, one hundred and nineteen persons from member countries and various international development organisations have been trained. The RTFS is a storm impact forecast tool which provides users with real-time hurricane hazard and impact information. The RTFS is made available on June 1 each year at the beginning of the Atlantic Hurricane Season or when a storm becomes active within the designated CCRIF monitoring region. The main users of the RTFS product include disaster and emergency managers and meteorological officers.

CCRIF believes that building capacity in catastrophe risk management at the individual level through support for education will ultimately contribute to the main objective of its overall technical assistance programme helping countries in the region deepen their understanding of natural hazards and catastrophe risk and the potential impacts of climate change.

In addition to providing scholarships, training and professional development opportunities, CCRIF continues to develop a range of informational products such as booklets and technical papers, around subject areas relating to disaster risk, risk-transfer solutions and climate change, which can promote informed decision making with respect to catastrophe risk as the Facility commits to increasing the focus of Caribbean governments on disaster risk reduction as part of national planning efforts.

The CCRIF TA Programme has...

- Awarded 14 scholarships to date both for study within the region and outside the region
- Disbursed over US\$200,000 for scholarships
- Provided support to individuals to engage in professional development opportunities that build their capacity in disaster risk management
- Developed an online training platform to support the delivery of training in the CCRIF Real-Time Forecasting System - 119 professionals employed to the meteorological services, disaster management organisations or environmental organisations have been trained
- Distributed over 20 publications (booklets, technical papers and booklets) between 2009 and 2012 geared towards disseminating information on disaster risk management and climate change adaptation

CCRIF Extra-Regional Scholarship Programme 2013

Look out for the advertisements announcing the start of the application process for 2013.

CCRIF Supports the 7th Annual Conference on Comprehensive Disaster Management

The Caribbean Catastrophe Risk Insurance Facility (CCRIF) provided US\$25,000 to support the 7th Annual Caribbean Conference on Comprehensive Disaster Management (CDM) hosted by the Caribbean Disaster Emergency Management Agency (CDEMA). The theme of the conference was "CDM: Building Disaster Resilience – A Shared Responsibility". CCRIF's support enabled it to host a session, which was entitled "Risk Financing and Insurance for Disaster Resilience". Papers and topics presented at this session were:

- "Is CCRIF a Viable Option for the Caribbean Region Today? Stakeholder Views and Observations from the World Bank Implementation Completion Report" – Mr Todd Crawford, Consultant and formerly of the World Bank
- DRM and Risk Transfer in the Tourism and Agricultural Sectors – "Financing and Insurance Solutions in the Private Domain vs. Sovereign Risk Transfer Solutions – Mr Matthew Pragnell of the CGM Gallagher Group
- "The Use of Microinsurance in the Reducing Vulnerability of Low-income Populations: the Launch of the Climate Risk Adaptation and Insurance in the Caribbean Project" – Ms Sobiah Becker of the Munich Climate Insurance Initiative (MCII)

CCRIF also had an informational booth at the conference at which it distributed many of its publications.

CCRIF has been a sponsor of the CDM Conference since 2008 and has contributed over this time in excess of US\$200,000 to the staging of the conference.



View of the CCRIF Booth



Mr Todd Crawford (right) responds to a question about CCRIF, while Mr Matthew Pragnell (left) looks on

About CCRIF

CCRIF is a risk pooling facility, owned, operated and registered in the Caribbean for Caribbean governments. It is designed to limit the financial impact of catastrophic hurricanes and earthquakes to Caribbean governments by quickly providing short-term liquidity when a policy is triggered. It is the world's first and, to date, only regional fund utilising parametric insurance, giving Caribbean governments the unique opportunity to purchase earthquake and hurricane catastrophe coverage with lowest-possible pricing. CCRIF represents a paradigm shift in the way governments treat risk, with Caribbean governments leading the way in pre-disaster planning. CCRIF was developed through funding from the Japanese Government, and was capitalised through contributions to a multi-donor Trust Fund by the Government of Canada, the European Union, the World Bank, the governments of the UK and France, the Caribbean Development Bank and the governments of Ireland and Bermuda, as well as through membership fees paid by participating governments.



An Economics of Climate Adaptation Study in the Caribbean led by CCRIF in collaboration with other partners revealed that: natural hazards represent a significant risk to inhabitants and economies in the Caribbean. Annual expected losses from wind, storm surge and inland flooding amount to up to 6% of GDP in some countries. Climate change has the potential to greatly exacerbate these risks, and could increase expected losses by 1 - 3 percentage points of GDP by 2030. Climate change will have an impact on local sea levels, hurricane intensity, precipitation and temperature patterns.

The study further stated that numerous adaptation measures are available to decision makers to respond to the growing threat of climate change. The results of the study further indicated that these adaptation measures can be organised into two broad groupings - risk mitigation and risk transfer and depending on each country's characteristics, risk mitigation initiatives can cost-effectively avert up to 90% of the expected loss in 2030 under a high climate change scenario. It further stated that risk transfer or insurance measures also play a key role in addressing the financial consequences of low-frequency, high-severity weather events and can be used to limit the financial impact for people and assist in extreme events. These changes in climate, particularly hydrometeorological events, will have an increasing impact on the Caribbean basin.

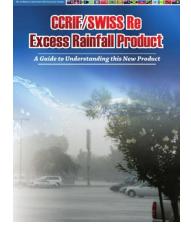
Whilst CCRIF's insurance cover has been extremely beneficial in the event of hurricanes and earthquakes, CCRIF member governments and some non-member countries (for example Guyana) still have significant exposure to floods. Many nations have stated that they view a flood or excess rainfall product as essential. Also, CCRIF participating countries and stakeholders have continued to express a strong interest in having available coverage for excess rainfall, both within hurricanes and in non-hurricane systems. In fact, a Beneficiary Assessment of CCRIF undertaken by the World Bank in 2010, revealed that 94% of respondents felt that CCRIF should cover other hazards, including flooding. It is for these reasons that CCRIF is launching a new insurance product to cover extreme rain events.

CCRIF Publishes a Guide to Understanding its new Excess Rainfall Product

In October 2012, CCRIF published a guide to understanding its new excess rainfall product. The guide presents the following information:

- Rationale for an Excess Rainfall Product for the Caribbean Region
- Developing the Excess Rainfall Product A CCRIF/Swiss Re Collaboration
- The CCRIF/Swiss Re Excess Rainfall Model
- Calculating Index Losses
- Country Rainfall Risk Profiles
- Establishing a Country's Excess Rainfall Policy
- Differences between the Excess Rainfall Product and CCRIF's Hurricane Product

The Guide shown at right is available on the CCRIF website.



The excess rainfall product is triggered independently of the current hurricane/tropical cyclone product, and if both policies trigger then both payouts are due. The current hurricane policy is linked to wind and storm surge damage in a defined Tropical Cyclone. While the excess rainfall product can be triggered for a Tropical Cyclone, it can also be triggered in non-cyclonic systems if the rainfall trigger thresholds are met. Note that rainfall is not included in the tropical cyclone model.



Report on the Use of the CCRIF Real-Time Forecasting System in 2012

The 2012 hurricane season began early with the formation of Tropical Storms Alberto and Beryl in May. In the period May to November, a total of nineteen named storms formed.

One hundred and three RTFS user accounts were created this year, bringing to 281 the total number of active RTFS user accounts. Most of the users of the RTFS are persons from the meteorological services, disaster management agencies, environmental ministries and international donor agencies. In 2012, a significant number of new ministries and agencies such as ministries of agriculture, tourism and foreign affairs were provided access at their request. In 2011 and 2010, 179 and 100 users, respectively, had access to the system. For the period June - November, the RTFS site was viewed 231 times from 13 countries. The RTFS is made available at the beginning of the Atlantic Hurricane Season each year which starts on 1 June or when a storm becomes active within the designated CCRIF monitoring region.

In order to facilitate CCRIF's member countries' use of the RTFS, CCRIF once again offered the course "Understanding and Using the CCRIF Real-Time Forecasting System" in partnership with the Caribbean Institute of Meteorology and Hydrology (CIMH) and Kinetic Analysis Corporation (KAC) using CCRIF's online training platform. The course was delivered on 11 & 12 July 2012.

The course was designed to enable users to better understand the information and data produced by the RTFS; the role the RTFS can play in decisions affecting expected hazard levels from storms and impacts on populations; and the RTFS in relation to other similar forecasting tools. Forty-one persons participated in the training and were comprised as follows:

- Disaster Management Officers: 18
- Meteorological Service Officers: 17
- Representatives of other institutions: 6 (Ministry of Agriculture, Food, Fisheries and Water Resource Management; Ministry of Home Affairs; Prime Minister's Office – all from Barbados)

Over the period 2011 and 2012, 110 persons participated in the RTFS course.

CCRIF Annual Report 2011-2012 is now available. Download a copy from the CCRIF website.



Sixteen governments are currently members of CCRIF:

Anguilla, Antigua & Barbuda, Bahamas, Barbados, Belize, Bermuda, Cayman Islands, Dominica, Grenada, Haiti, Jamaica, St. Kitts & Nevis, Saint Lucia, St. Vincent & the Grenadines, Trinidad & Tobago and Turks & Caicos Islands

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