



# Annual Report 2014-2015



#### **Cover Photos**

#### Top Row (Left to Right)

CCRIF scholarship recipient Ms. Germaine Maxwell from Saint Lucia at her graduation ceremony at the University of Southampton, where she received an MSc in Risk Management

#### Tropical Cyclone Gonzalo

Mr. Martin Cox, Director of Finance and Economic Affairs in Barbados receives a cheque from CCRIF Board Member Mrs. Faye Hardy at a ceremony in December 2014, due as a result of the triggering of Barbados' excess rainfall policy after a trough that occurred on 21 November 2014

#### Middle Row (Left to Right)

Impacts of heavy rain in Barbados due to the November 2014 trough Representatives of COSEFIN, the World Bank and CCRIF at the signing of the Memorandum of Understanding between CCRIF and COSEFIN in April 2015

#### Bottom Row

Construction of a new sea wall at Sandyport Beach in The Bahamas. This project was partially funded by CCRIF, which provided US\$ 85,000 under its Technical Assistance Programme to the Government of The Bahamas after the passage of Hurricane Sandy in 2012 for the implementation of post-Sandy recovery activities. This project is an example of an activity to reduce the vulnerability of communities to natural hazards.



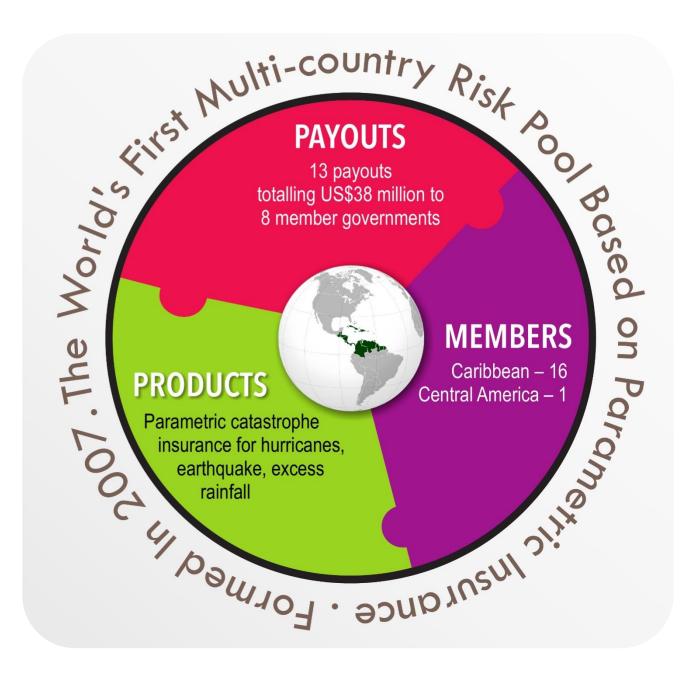
# **ANNUAL REPORT 2014-2015**

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November 2015



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# **LIST OF ACRONYMS**

AOSIS	Alliance of Small Island States
AST	Atlantic Standard Time
BMU	German Federal Ministry of the Environment and Nuclear Safety
CARE	Covered Area Rainfall Event
CARICOM	Caribbean Community
CCCCC	Caribbean Community Climate Change Centre
CDB	Caribbean Development Bank
CDEMA	Caribbean Disaster Emergency Management Agency
CDM	Comprehensive Disaster Management
CEO	Chief Executive Officer
CIMH	Caribbean Institute for Meteorology and Hydrology
COO	Chief Operations Officer
COSEFIN	Council of Ministers of Finance of Central America, Panama and Dominican Republic
DaLA	Damage and Loss Assessment
DRM	Disaster Risk Management
ECA	Economics of Climate Adaptation
FY	Fiscal Year
GFS	Global Forecasting System
IKI	International Climate Initiative (Germany)
IStructE	Institution of Structural Engineers
JAXA	Japan Aerospace Exploration Agency
КАС	Kinetic Analysis Corporation
LPC	Loan Portfolio Cover
LPP	Livelihood Protection Policy
MCII	Munich Climate Insurance Initiative
MMI	Modified Mercalli Index
MoU	Memorandum of Understanding
MPRES	Multi-Peril Risk Estimation System
NASA	National Aeronautics and Space Administration (USA)
NDC	National Disaster Committee
NGO	Non-Governmental Organization
NHC	National Hurricane Center (USA)
OECS	Organisation of Eastern Caribbean States
PR	Public Relations
RTFS	Real-Time Forecasting System
SIDS	Small Island Developing States
SPC	Segregated Portfolio Company
SRC	Seismic Research Centre (University of the West Indies, St. Augustine, Trinidad)
ТА	Technical Assistance
UK	United Kingdom
UN	United Nations
UNECLAC	United Nations Economic Commission for Latin America and the Caribbean
UNSG	United Nations Secretary-General
US	United States
USA	United States of America
USGS	United States Geologic Survey
UTC	Coordinated Universal Time
UWI	University of the West Indies
XSR	Excess Rainfall



In 2007, the Caribbean Catastrophe Risk Insurance Facility was formed as the first multi-country risk pool in the world, and was the first insurance instrument to successfully develop parametric policies backed by both traditional and capital markets. It was designed as a regional catastrophe fund for Caribbean governments to limit the financial impact of devastating hurricanes and earthquakes by quickly providing financial liquidity when a policy is triggered.

In 2014, the facility was restructured into a segregated portfolio company (SPC) to facilitate offering new products and expanding into new geographic areas and is now named CCRIF SPC. The new structure, in which products are offered through a number of segregated portfolios, allows for total segregation of risk. CCRIF SPC is registered in the Cayman Islands and operates as a virtual organisation, supported by a network of service providers covering the areas of risk management, risk modelling, captive management, reinsurance, reinsurance brokerage, asset management, technical assistance, corporate communications and information technology.

In 2015, CCRIF expanded to Central America, when CCRIF and COSEFIN (the Council of Ministers of Finance of Central America, Panama and the Dominican Republic) signed a Memorandum of Understanding to provide catastrophe insurance to Central American countries. Also at that time, Nicaragua signed a Participation Agreement, becoming the first CCRIF member from Central America.

CCRIF currently offers earthquake, tropical cyclone and excess rainfall policies to Caribbean and Central American governments.

CCRIF helps to mitigate the short-term cash flow problems small developing economies suffer after major natural disasters. CCRIF's parametric insurance mechanism allows it to provide rapid payouts to help members finance their initial disaster response and maintain basic government functions after a catastrophic event.

Since the inception of CCRIF in 2007, the facility has made 13 payouts for hurricanes, earthquakes and excess rainfall totalling US\$38 million to eight member governments. All payouts were transferred to the respective governments within 14 days (and in some cases within a week) after the event.

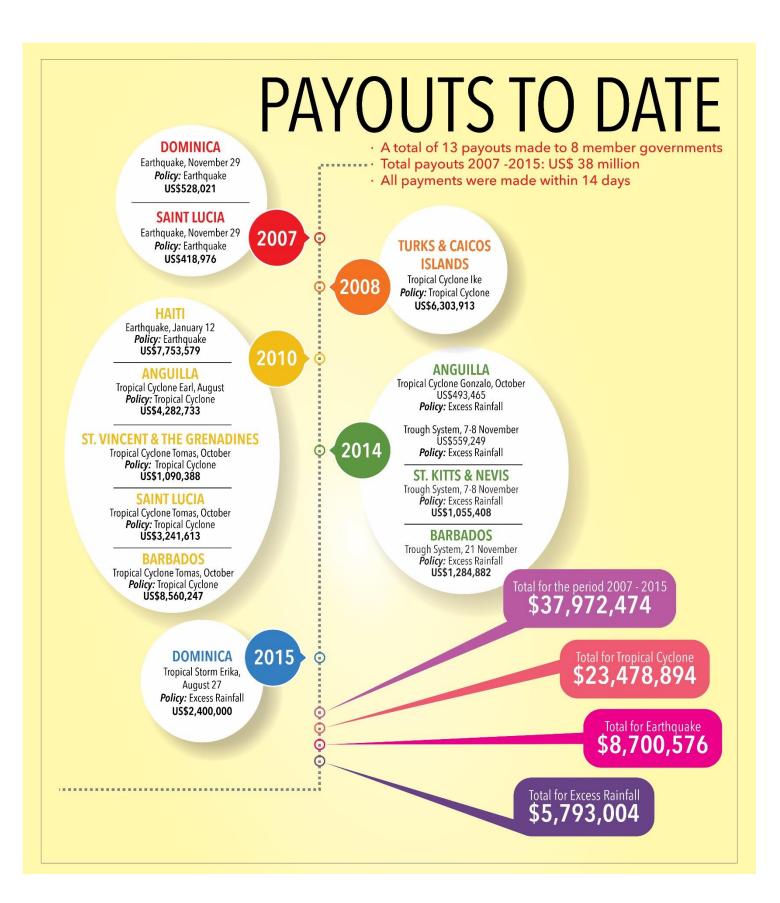
CCRIF was developed under the technical leadership of the World Bank and with a grant from the Government of Japan. It was capitalised through contributions to a multi-donor Trust Fund by the Government of Canada, the European Union, the World Bank, the governments of the United Kingdom and France, the Caribbean Development Bank and the governments of Ireland and Bermuda, as well as through membership fees paid by participating governments.

The current members of CCRIF are:

Caribbean – 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 **Central America – Nicaragua** 







# **CCRIF STRATEGIC FRAMEWORK**



CCRIF's strategic objectives are designed to enable the facility to fulfil its mission and realize its vision and to aid in the design of its strategic initiatives and key activities. CCRIF's strategic objectives have been designed to be SMART (specific, measurable, achievable, realistic and timebound) to enable the facility to continuously meet and exceed the needs and expectations of its clients and stakeholders. Over the period 2015 to 2018, CCRIF will endeavour to achieve the following strategic objectives:



### **CHAIRMAN'S REMARKS**



I am pleased to present this CCRIF Annual Report for 2014-2015.

This year, CCRIF – known as the Caribbean Catastrophe Risk Insurance Facility since its inception in 2007 – was re-structured into a segregated portfolio company (SPC) and is now named CCRIF SPC. This change was made to facilitate the offering of new products (such as the excess rainfall product) and expansion into new geographic areas and will broaden the scope of CCRIF activities in enhancing disaster risk management. The new structure allows for total segregation of risk, but still provides opportunities to share operational functions and costs and to maximize the benefits of pooled access to reinsurance markets and catastrophe financing.

I would like to welcome the countries of Central America to CCRIF. The signing of a Memorandum of Understanding between CCRIF and COSEFIN (the Council of Ministers of Finance of Central America, Panama and the Dominican Republic) in April paved the way for

Central American countries to access catastrophe coverage from which our Caribbean members have benefitted since 2007. This expansion will provide a more diversified portfolio and cheaper access to the reinsurance market resulting in more affordable premiums for new and existing members. I am pleased to announce that Nicaragua became the first CCRIF member from Central America when the Government signed a Participation Agreement also in April. I wish to thank the World Bank and the United States Department of the Treasury for facilitating this process, which culminated in the signing of the MoU and the establishment of a Multi-Donor Trust Fund for the Central America portfolio. CCRIF also thanks the 16 Caribbean members for providing their "No Objection" to the initiative, which was a pre-requisite for establishing this new partnership.

It is noteworthy that eight member countries purchased the new excess rainfall product this year for the first time. This decision proved to be prudent, as three member countries received payouts on their excess rainfall policies this year. We are encouraged by interest from other members – as well as non-member countries – in this new product.

During this fiscal year, CCRIF placed a strong focus on its corporate governance framework. Transparency and accountability are integrated at all levels of our decision-making and business-planning processes and the Board is committed to maintaining CCRIF's strong capital base to maintain favourable insurance rates for its members and retain its claims-paying capacity. In addition to restructuring to become an SPC and enabling Central America to join the facility, CCRIF engaged in a strategic planning process to develop a new strategic plan for 2015-2018, building on the previous plan that ended in May 2015. Our focus on new products and inclusion of regions beyond the Caribbean is reflected in our new vision and mission statements as well as our new strategic objectives.

Throughout this fiscal year, CCRIF has engaged with national, regional and international stakeholders and interested parties to increase understanding of the facility and its products and services. CCRIF is being recognized increasingly by international organizations and bodies. In early 2015, a report from ClimateWise highlighted the importance of insurance, reinsurance and insurance-linked securities in

addressing climate change concerns and lauded the work of innovative products, including CCRIF and the African Risk Capacity, for which CCRIF was a model. And in June this year, the G-7 commented on climate risk insurance in developing countries and announced action to support efforts by vulnerable developing countries to manage climate change-related disaster risk through insurance, building upon existing risk insurance facilities such as CCRIF. The aim is to increase the number of people with access to direct or indirect climate risk insurance coverage by up to 400 million by 2020.

The CCRIF model is seen to be useful in areas other than natural hazards. In March, World Bank President Jim Yong Kim announced plans of the World Bank Group to develop a pandemic emergency facility that would be fashioned after CCRIF and trigger payouts as the result of biological threats through epidemics or pandemics. CCRIF is currently part a committee working on this initiative.

With these new initiatives, we look forward to an exciting year ahead and expect that 2015-16 will be a productive and rewarding year.

WIIIZ

Milo Pearson, Chairman

## **CEO'S REPORT**



In this, my third year as CCRIF's Chief Executive Officer, I am pleased to highlight the main areas of work undertaken by the facility and key elements of its performance during the past fiscal year. CCRIF's performance is a reflection of its extensive experience as a regional insurance facility and commitment to high quality products and services. Since 2007, CCRIF has built a high level of trust and loyalty among member countries.

2014/2015 was a busy year for CCRIF as the facility undertook a wide range of actions towards serving our current members and expanding CCRIF's membership. This annual report presents progress during the year towards the achievement of each of CCRIF's six strategic objectives.

One of the most notable developments within CCRIF in the past year was the restructuring of the facility into a segregated portfolio company, marked by its change of name to CCRIF SPC. This restructuring was in

keeping with the strategic plans to prepare CCRIF for offering new products and serving new members. CCRIF SPC now comprises a "Core" which holds general assets of CCRIF and undertakes no underwriting activity and three segregated portfolios (SPs), which perform underwriting activities to provide earthquake and tropical cyclone coverage to Caribbean governments, excess rainfall coverage to Caribbean governments and loan portfolio coverage to Caribbean governments.

Whilst the adoption of the new structure presented some unique challenges, CCRIF maintained full compliance with the regulatory framework of the Cayman Islands jurisdiction. I am pleased to note that CCRIF maintained its strong financial performance as reflected in the audited financial statements. Of note in this annual report is the difference in the presentation of the financial statements which require that the SPs be presented separately and without a consolidated position. Examination of the financial performance will indicate significant growth owing primarily to the expanded business lines through the introduction of the excess rainfall product and strengthening of the cash position of the Company.

Since its inception, CCRIF has remained financially robust, successfully securing reinsurance and maintaining the ability to make payouts when policies were triggered and has retained an acceptable level of risk, which impacts positively on profitability and sustainability. CCRIF is committed to sound financial risk management through risk mitigating instruments, liquidity management and relationships with donors in the event of an unexpected high frequency of severe hazard events. CCRIF manages risk through adequate capitalization, the segregated portfolio structure, oversight committees, internal controls documented in operations manuals, stringent financial controls and management of intercompany transactions.

This year, CCRIF benefited from improved pricing in the risk transfer market and through the value earned from utilizing a cat bond as part of the risk transfer mechanism. Although performance was tempered by the volatility of earnings from investments brought on by global economic factors, CCRIF is well poised to continue its successful provision of services to its members.

For the 2014/15 policy year, CCRIF's claims paying capacity was approximately US\$156 million, which was significantly higher than the year's target of US\$110 million. CCRIF provided a claims paying capacity for aggregate annual losses with an approximately 1-in-526 chance of occurring.

Despite difficult financial and economic circumstances, each year CCRIF member countries continue to recognize the value of CCRIF's insurance products. This year, CCRIF members purchased 15 tropical cyclone policies, 13 earthquake policies and – for the first time – 8 excess rainfall policies. CCRIF made 4 payouts totalling approximately US\$3.4 million to 3 member governments – Anguilla, Barbados and St. Vincent & the Grenadines – on their excess rainfall policies.

A major accomplishment this year was CCRIF's expansion into Central America through the signing of a Memorandum of Understanding between CCRIF and COSEFIN in April 2015. This will allow Central American countries to purchase catastrophe insurance from CCRIF. At that time, Nicaragua signed a Participation Agreement, thus becoming the first CCRIF member from Central America.

CCRIF believes in an integrated approach to disaster risk management, and in addition to providing catastrophe insurance, also remains committed to building capacity in the region. In keeping with this commitment, our Technical Assistance Programme was expanded this year. In March, two new capacity development programmes were launched: the CCRIF Regional Internship Programme – to benefit Caribbean university graduates and regional institutions – and the CCRIF Small Grants Programme – to provide support for NGOs and similar organizations to implement disaster risk reduction projects. Under the CCRIF scholarship programmes, CCRIF awarded scholarships to two persons to pursue post-graduate study in the UK and to five persons to pursue post-graduate and undergraduate studies at the University of the West Indies (UWI).

We continued to work with regional organizations with which CCRIF has partnership agreements. The Seismic Research Centre at the UWI St. Augustine campus (in Trinidad) completed its project to establish a new accelerometric network in the Eastern Caribbean and Jamaica. This network will enhance the capability for identifying and mitigating seismic risk in the Caribbean. Work with the United Nations Economic Commission for Latin America and the Caribbean focused on improving damage and loss assessment in the Caribbean.

This year, the Climate Risk Adaptation and Insurance in the Caribbean project was completed in three pilot countries. Under this project, led by the Munich Climate Insurance Initiative (MCII) and implemented by MCII, CCRIF, MicroEnsure and Munich Re, two microinsurance products aimed at low-income individuals were developed: the Livelihood Protection Policy (LPP) and Loan Portfolio Cover (LPC). Six hundred LPP policies have been sold to small farmers and other workers, providing these persons with a level of financial security in the event of extreme wind or rainfall that may affect their livelihoods.

CCRIF continued efforts to promote country risk management and developed a concept note on country risk management in the Caribbean, presenting the case for advancing risk governance and country risk officers. Country risk management aims to strengthen the institutional framework in countries for addressing disaster and financial risks, among others, given the vulnerability of the Caribbean region. This approach will allow countries to address risks in a strategic way across the whole of government in a comprehensive manner.

CCRIF continued to build capacity of members and to raise awareness of what the facility has to offer. This year, a training component was included in the annual policy renewal discussions for key stakeholders in

the finance ministries as well as disaster management and meteorology agencies. The training focused not only on the specific elements of CCRIF's parametric policies but also on the broader context of how risk transfer (e.g. catastrophe insurance), as part of a country's disaster management and climate adaptation strategies, can support its fiscal and economic policy framework. This training facilitated decision making around policy renewals and scaling up coverage and supplemented the usual examination of different scenarios for possible policy options. In addition to this training, CCRIF produced over 20 publications aimed at raising awareness among CCRIF stakeholders.

As countries and organizations become more interested in CCRIF, the facility is invited to participate in conferences, meetings and fora to increase knowledge of CCRIF and its products. This year, CCRIF attended 14 such events in the Caribbean, USA and Europe – including the United Nations Framework Convention on Climate Change (UNFCCC) Second Forum of the Standing Committee on Finance, the UN Secretary-General's 2014 Climate Summit, the G7 Stakeholder Conference on Climate Risk Insurance and Caribbean Central America Action's 38<sup>th</sup> Annual Conference on the Caribbean and Central America.

There have been two recent organizational changes. Ms. Gillian Golah was appointed CCRIF's first Chief Operations Officer, effective 1 October 2015. With a background in actuarial sciences and risk management, Ms. Golah has significant experience in the financial services sector. The engagement of a full-time Chief Operations Officer became necessary given the facility's growing operational activities and was a decision made to enable the CEO to focus on the "big picture" as CCRIF continues to expand into new geographic regions, develop new products and pursue special initiatives in support of its members. Ms. Golah will be responsible for overseeing and ensuring the effectiveness and efficiency of CCRIF's day-to-day operations.

The consortium of Evaluacion de Riesgos Naturales (ERN) and Risk Engineering and Design (RED) was named as the new Risk Management Specialist for CCRIF, effective 1 September 2015. ERN/RED assumes the responsibilities previously held by the Facility Supervisor for providing the services of risk management, catastrophe modelling and coordination of reinsurance placement and will provide technical support for developing additional products, services and tools to meet the needs of member governments. The ERN/RED consortium is led by Dr. Paolo Bazzurro and team members include specialists in catastrophe and risk management, catastrophe modelling and climate change.

On behalf of the CCRIF Board and Team, I would like to welcome Ms. Golah and the ERN/RED team and to express our appreciation to Caribbean Risk Managers Ltd., which was the CCRIF Facility Supervisor from the facility's inception in 2007.

I am pleased with the progress made by CCRIF this year and look forward to working with our stakeholders in the Caribbean and Central America – and beyond – in the coming year.

Isaac Anthony, Chief Executive Officer



#### MILO PEARSON, CHAIRMAN

Milo Pearson has over 40 years of insurance experience and has created two landmark organizations that have had an important and lasting impact on the insurance industry in California: the California Earthquake Authority and the Rate Regulation Division of the California Department of Insurance. As a senior partner of Insurance Solutions Group, Mr. Pearson specializes in regulatory and catastrophe-related issues. He is also the Executive Director for the Pacific Association of Domestic Insurance Companies, an industry trade association.



#### KEN BLAKELEY, CARICOM-NOMINATED BOARD MEMBER, INSURANCE SPECIALIST

A former President of both the Insurance Company of the West Indies (ICWI) and Eagle Star Insurance Company of Puerto Rico, Ken Blakeley has had a long tenure in Caribbean insurance. His 40-year career in the region's insurance market began with a stint as a Resident Inspector in Trinidad & Tobago leading him to positions as a Managing Director, Agency Manager and now, as a Technical Advisor and Director at Billy Craig Insurance Brokers in Jamaica. Mr. Blakeley has also served as the Deputy Chairman, Jamaica Association of General Insurance Companies, Chairman of the Board of Studies for the Insurance Institute of Jamaica and as Chairman of the Insurance Institute of Jamaica.



# DESIRÉE CHEREBIN, CARIBBEAN DEVELOPMENT BANK-NOMINATED BOARD MEMBER, FINANCE SPECIALIST

Desirée Cherebin is a Banking Supervision and Financial Services Consultant working with regional and international agencies, including the Caribbean Regional Technical Assistance Centre and the International Monetary Fund to assist countries with strengthening the regulation and supervision of their financial sectors. She was Director of Bank Supervision at the Central Bank of Barbados prior to her retirement from that institution in 1997. She also worked as an Economist with the Ministry of Trade in Barbados and as an Advisor to the Governor of the Central Bank of Barbados.



# FAYE HARDY, CARIBBEAN DEVELOPMENT BANK-NOMINATED BOARD MEMBER, REPRESENTING DONORS

Appointed to the CCRIF Board by the Caribbean Development Bank (CDB), Faye Hardy has over twenty years of experience in the areas of finance and accounting, and currently serves in the position of Manager, Treasury Unit at the Caribbean Development Bank where she has responsibility for managing the cash and investment resources of the Bank. She is a certified investment professional with a Chartered Financial Analyst (CFA) designation, as well as a Fellow of the Association of Chartered Certified Accountants (FCCA). She also holds an MBA from Heriot-Watt University in Scotland. Mrs. Hardy has provided technical assistance and advice to other regional organizations, and regularly lends her expertise in a financial capacity to a variety of volunteer organizations.



#### TIMOTHY ANTOINE, CARICOM-NOMINATED BOARD MEMBER, REPRESENTING MEMBER COUNTRIES

Appointed to the CCRIF Board by CARICOM, Timothy Antoine is presently the Permanent Secretary in Grenada's Ministry of Finance and Energy and Ministry of Economic Development, Trade, Planning and Cooperatives. From 2005 to 2007, Mr. Antoine acted as an Advisor to the Executive Director for Canada, Ireland and the Caribbean at the World Bank, working on behalf of the Caribbean and played a significant role in the establishment of CCRIF in 2007. An economist by training, he also is Chairman of the Grenada Authority for the Regulation of Financial Institutions, a board member of the Eastern Caribbean Central Bank and Grenada's Operational Focal Point for the Global Environmental Facility.



### **EXECUTIVE MANAGEMENT**

#### ISAAC ANTHONY CHIEF EXECUTIVE OFFICER

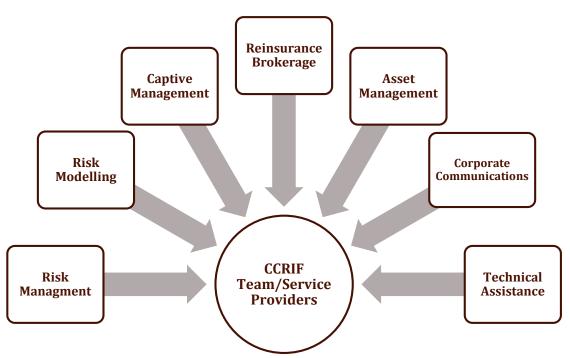
Isaac Anthony was appointed CCRIF Chief Executive Officer on January 1, 2013. Prior to this appointment, Mr. Anthony served as Permanent Secretary, Planning and National Development in the Government of Saint Lucia. He also has served his country in key positions such as Accountant General, Registrar of Insurance, Director of Finance and Permanent Secretary, Finance. He served as a CCRIF board member appointed by CARICOM from 2007 to 2012. Mr. Anthony 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. Mr. Anthony is a graduate of the University of the West Indies, with a Bachelor of Science degree in Economics and Accounting and an MBA from that institution.



#### GILLIAN GOLAH CHIEF OPERATIONS OFFICER

Gillian Golah was appointed CCRIF Chief Operating Officer at CCRIF on 1 October 2015. Before she assumed this position, Ms. Golah was the Vice President of Business Development at the Trinidad & Tobago International Financial Centre, where she played a central role in the establishment of the financial services outsourcing industry in Trinidad & Tobago. Previously, she served as Chief Operating Officer of Development Finance Limited after gaining substantial experience in credit operations, private equity, grant management and microfinance at the executive and board levels. Ms. Golah received a Bachelor's degree from the University of the West Indies with First Class Honours and a Master's degree in Actuarial Sciences from Heriot-Watt University Edinburgh after being awarded a scholarship from the Department for International Development. She also holds a Financial Risk Manager (FRM) designation from the Global Association of Risk Professionals.

### **CCRIF TEAM**



CCRIF operates as a virtual organization, supported by a network of service providers – the CCRIF Team – that covers the areas of risk management, risk modelling, captive management, reinsurance, reinsurance brokerage, asset management, technical assistance, partnership development, corporate communications and information technology.



# EVALUACÍON DE RIESGOS NATURALES (ERN) / RISK ENGINEERING AND DESIGN (RED), RISK MANAGEMENT SPECIALIST

The ERN/RED consortium team provides the services of risk management, financial planning, catastrophe modelling and coordination of reinsurance placement for CCRIF. RED, which began its activity in 2008, has expertise in catastrophe risk modelling for earthquakes, tropical cyclones and floods. RED's projects deal with issuance of catastrophe bonds for sovereign countries and designing products for catastrophe risk management of insurance facilities. ERN was founded in 1996 and is the leading catastrophe risk modelling firm in Latin America. ERN has developed models for several perils, including earthquake, tropical cyclone and drought, and for many countries in the world. Several of ERN's models are used by governments for insurance regulation. Paolo Bazzurro is the ERN/RED team leader for CCRIF.

#### KINETIC ANALYSIS CORPORATION, HAZARD AND RISK ASSESSMENT SPECIALIST



Kinetic Analysis Corporation (KAC) is a leader in multi-model risk assessment and impact forecasting for extreme weather, earthquakes and other catastrophe events. Kinetic Analysis produces accurate, site-specific assessments of the potential impact of natural hazards and resulting loss for events around the globe. Kinetic Analysis conducts hurricane and earthquake hazard and risk assessments and provides rainfall estimates that underlie the catastrophe insurance products offered by CCRIF. Jan Vermeiren and Steven Stichter are KAC's team leaders for CCRIF.

#### LONDON & CAPITAL LTD., ASSET MANAGER

London & Capital is a specialist asset management company headquartered in London, UK. With more than 20 years' expertise and experience, the company focuses on capital preservation and wealth management. William Dalziel is London and Capital Limited's team leader for CCRIF.

#### BUTTERFIELD ASSET MANAGEMENT LTD., ASSET MANAGER



**GUY CARPENTER** 

MARSH MERCER KROLL

Butterfield Asset Management is a fully integrated group business, operating across 4 jurisdictions – Bermuda, The Cayman Islands, London and Guernsey – and has been an investment manager for primary insurance and captive insurance companies in Bermuda and the Cayman Islands for over 25 years. Butterfield Bank Cayman was incorporated in 1967 as a wholly-owned subsidiary and is regulated by the Cayman Islands Monetary Authority. Andrew Baron is Butterfield's team leader for CCRIF and is Head of Fixed Income for the Group.

#### **GUY CARPENTER & COMPANY, LLC, REINSURANCE BROKER**

Guy Carpenter & Company, LLC is the world's leading risk and reinsurance specialist and a member of Marsh & McLennan Companies. With over 50 offices worldwide, Guy Carpenter creates and executes reinsurance solutions and delivers capital market solutions for clients across the globe. Aidan Pope is Guy Carpenter's team leader for CCRIF.

#### SAGICOR INSURANCE MANAGERS LTD., INSURANCE MANAGER



Sagicor Insurance Managers Ltd. (SIM) is a member of the Sagicor Financial Group, which is listed on the Barbados, Trinidad & Tobago and London Stock Exchanges. Formed originally as Barbados Mutual in 1840, Sagicor has become the leading indigenous financial services organization in the Caribbean, with a presence in 21 countries across the Caribbean, the United Kingdom, in 41 states of the United States and the District of Columbia. SIM provides insurance management services in the Cayman Islands, and provides regulatory, accounting and corporate secretarial support to CCRIF. Ivan Carter is Sagicor's team leader for CCRIF and is supported by Kimberlyn Battick as the Account Manager.

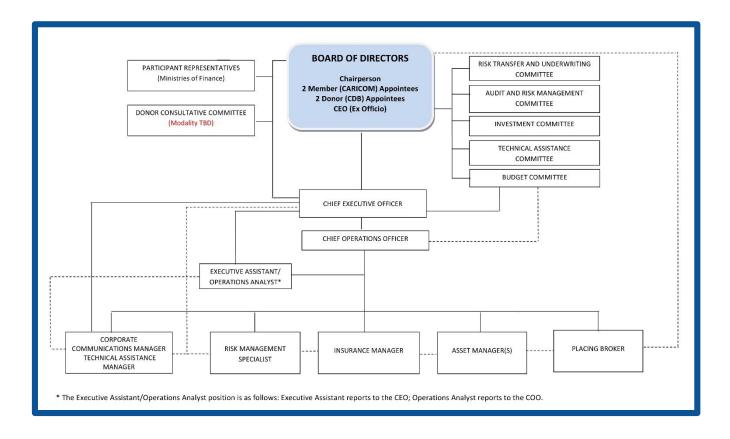
#### SUSTAINABILITY MANAGERS, CORPORATE COMMUNICATIONS AND TECHNICAL ASSISTANCE MANAGER



Sustainability Managers (SM) is a consultancy company based in Jamaica that offers a range of services to public and private sector entities as well as international and regional organizations. As Corporate Communications Manager, Sustainability Managers provides CCRIF with the following services: publications development, events planning, public relations and media relations management, strategic planning and training. SM also manages the implementation of the CCRIF Technical Assistance Programme. Elizabeth Emanuel is the team leader for Sustainability Managers and is supported by Gina Sanguinetti Phillips as the Programme Director.

# **CCRIF ORGANIZATIONAL STRUCTURE**

CCRIF's operations are laid out in the facility's Operations Manual and are executed by six service provider companies under the guidance of the Board of Directors, the Chief Executive Officer (CEO) and the Chief Operations Officer (COO).



### CCRIF YEAR IN REVIEW 2014-2015 – A SNAPSHOT

## Achieving Our Strategic Objectives 2014-2015 MEMBERSHIP RESILENCE SO3: SO4: CORE SO2: SO5: BUSINESS PARTNERSHIPS SO1: SO6: **CORE BUSINESS**

#### S01: To provide products, services and tools responsive to the needs of members

- · Issued 36 tropical cyclone (TC), earthquake (EQ), excess rainfall (XSR) policies to 15 Caribbean countries
- Made 4 payouts totalling US\$ 3.4 million made to 3 member governments on XSR policies
- · Livelihood Protection Policy offered, Loan Portfolio Cover on market
- · Increased number of users of Real-Time Forecasting System

#### RESILIENCE

Bahamas

#### SO2:` To enhance capacity for disaster risk management and climate change adaptation

- Launched CCRIF Regional Internship Programme
- · Launched CCRIF Small Grants Programme
- · Awarded 2 post-graduate scholarships for study in the UK · Awarded 5 post-graduate and undergraduate scholarships for
- study at UWI Post-Hurricane Sandy recovery project completed in The

#### **CORPORATE GOVERNANCE** SO3 To sustain corporate and financial integrity

- · The Caribbean Catastrophe Risk Insurance Facility renamed as CCRIF SPC
- Met sustainability guidelines of being able to survive a 1 in 1,000 year event
- Benefited from World Bank cat bond for CCRIF member countries
- CCRIF awarded Best Latin America Reinsurance Deal at Reactions 2015 Latin America Awards

#### To deepen understanding and knowledge of catastrophe risk and the solutions CCRIF provides

- · Conducted training and policy renewals discussions with member governments
- · Produced over 20 publications
- · Participated in over 30 conferences and stakeholder meetings

#### MEMBERSHIP SO5: To expand membership

- · Signed MOU with COSEFIN to include Central American countries
- · Nicaragua signed Participation Agreement first Central American member

#### PARTNERSHIPS **SO6** To deepen strategic partnerships

- · Strategic Donor Meeting hosted by CDB and CCRIF
- Conducted RTFS training for OECS countries and OECS Commission; began project with OECS to develop strategic and action plans for vulnerable communities in Saint Lucia
- Conducted assessment of UNECLAC's DaLA in the Caribbean; developed new work plan to develop guidelines for estimating environmental losses associated with disasters and update DaLA training materials
- Began project with CDEMA to develop accreditation standards for disaster readiness
- SRC completed project to establish new Accelerometric Network in the Eastern Caribbean and Jamaica

Strategic Objective 1 To Provide Products, Services and Tools Responsive to the Needs of Members



Strategic Objective 1 focuses on ensuring that CCRIF meets the needs of current and potential member countries. The facility is continuously seeking to improve its products and services as well as to develop new initiatives at the request of its members. CCRIF continues to offer its Tropical Cyclone and Earthquake policies and now offers Excess Rainfall policies to its member countries. The facility works with its members to define adequate coverage levels and with key donors to facilitate members attaining these levels of coverage. Also CCRIF has collaborated with the Munich Climate Insurance Initiative to develop new parametric microinsurance products targeted at meeting the specific needs of low-income, vulnerable persons. The facility continues to support its Real-Time Forecasting System, a valuable service for members.

# **CCRIF's INSURANCE PRODUCTS**



#### **Tropical Cyclone, Earthquake and Excess Rainfall Policies**

Policy year 2014/15 marked the first time that countries purchased the new excess rainfall policies as part of their catastrophe insurance portfolios. For the 2014/2015 policy year, CCRIF members purchased 15 tropical cyclone (TC) policies, 13 earthquake (EQ) policies and 8 excess rainfall (XSR) policies as shown by the shaded areas in the table below.

CCRIF Member	Policies Purchased for 2014/15		
Country	ТС	EQ	XSR
Anguilla			
Antigua & Barbuda			
Barbados			
Belize			
Bermuda			
Cayman Islands			
Dominica			
Grenada			
Haiti			
Jamaica			
Saint Lucia			
St. Kitts & Nevis			
St. Vincent & the Grenadines			
Turks & Caicos Islands			
Trinidad & Tobago			

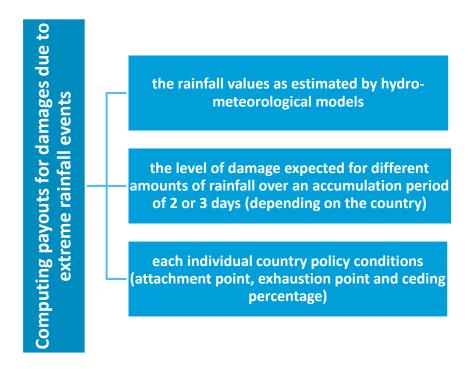
The excess rainfall product was developed in collaboration with Swiss Re and Kinetic Analysis Corporation and is based on satellite rainfall data. A country's excess rainfall policy is triggered independently of its tropical cyclone policy, which is based on wind and storm surge, and if both policies are triggered by a tropical cyclone event, then two separate payouts would be due. 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.

CCRIF continued discussions with other countries in the region to explore their interest in the excess rainfall product and four additional countries committed to purchasing the product for the policy year 2015/2016.

#### **CCRIF Rainfall Model**

CCRIF began modifications to the rainfall model that underpins the XSR product during this policy year. The new model – the CCRIF SPC XSR Parametric Rainfall Model – is based on a model Global Forecasting System (GFS) that assimilates, when available, data such as rain, temperature, wind speed, humidity and pressure to improve the modelled rain estimates. The choice of this GFS dataset was made based on the accuracy and reliability of future daily rainfall estimates and on the availability of a relatively long period of past data, which is necessary to fine-tune a forecasting rainfall model.

CCRIF computes the payouts for damages due to extreme precipitation events based on the following:



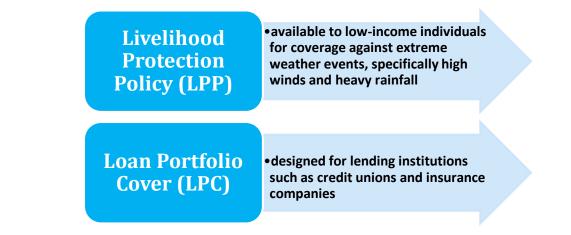
These modifications to the model were made to address the anticipated termination of the Tropical Rainfall Measurement Mission (TRMM) – a joint space mission between the US National Aeronautics and Space Agency (NASA) and the Japan Aerospace Exploration Agency (JAXA) – which provided satellite rainfall data for the previous model. Designed to monitor tropical/subtropical precipitation, the TRMM had been operative since 1998 but on 8 April 2015, the spacecraft depleted its fuel reserves and shortly

thereafter fell out of the sky. Therefore, the satellite would no longer be available for use in the CCRIF model. The new CCRIF XSR model will be in place for the 2015/2016 excess rainfall policies.

#### **Microinsurance Products**



Over the period 2010 – 2014, CCRIF was a key partner in the Climate Risk Adaptation and Insurance in the Caribbean project, which developed two innovative microinsurance products:



The project was led by the Munich Climate Insurance Initiative (MCII) and implemented by CCRIF, MicroEnsure and Munich Re in partnership with MCII. Funding for the project was provided by the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) under the International Climate Initiative (IKI).

Targeted at individuals, the LPP is designed to help protect the livelihoods of vulnerable low-income individuals such as small farmers and day labourers, by providing quick cash payouts following extreme weather events (high winds and heavy rainfall). Provided through local insurance companies and financial institutions, it is currently available in three pilot countries – Saint Lucia, Jamaica and Grenada. Six hundred policies have been sold to date.



The LPC complements the LPP and is targeted at financial institutions. It is a loan portfolio hedge for lending institutions that "insures" loan portfolios against climate risk so that investment can reach areas previously considered too risky for traditional lending. The LPC was placed on the market in 2014.

Discussions are taking place regarding increasing the uptake of the LPP and the sale of the LPC in the three pilot countries. Also, CCRIF is pursuing options for provision of both the LPP and the LPC to other Caribbean countries. To support the LPP product, CCRIF will continue to provide wind data to the calculation agent and will be assuming an advisory role. CCRIF will be the sole insurer selling and managing the LPC in the Caribbean and will also provide wind data to the calculation agent.



The LPP is designed to help protect the livelihoods of vulnerable low-income individuals such as small farmers and day labourers, by providing quick cash payouts following extreme weather events (high winds and heavy rainfall)

# EVENT REPORTING -TROPICAL CYCLONES, EXCESS RAINFALL AND EARTHQUAKES

CCRIF monitors and reports on all tropical cyclone (TC) and earthquake (EQ) events in the Caribbean Basin that have the potential to affect one or more of its member countries as determined by CCRIF's Multi-Peril Risk Estimation System (MPRES) under the terms of CCRIF's tropical cyclone and earthquake policies. CCRIF also monitors and reports on rainfall events that have the potential to affect one or more of its member countries that have excess rainfall (XSR) policies – as determined by the Caribbean Rainfall Model. The MPRES model was developed for CCRIF and is supported by Kinetic Analysis Corporation (KAC) and the Caribbean Rainfall Model was developed by KAC and reinsurer Swiss Re.

Three types of events – reportable, loss and triggering events – are defined and routinely reported by CCRIF to its members and stakeholders. The box below provides definitions of these terms. Note that one tropical cyclone event can generate a tropical cyclone and an excess rainfall report.

### **Reportable Event**

- **Tropical Cyclone:** Any named tropical cyclone event which generates winds of Tropical Storm strength or above in one or more grid cells of at least one member country with a TC policy but which does not produce any modelled government loss.
- Excess Rainfall Event: Any rainfall event, for example a tropical wave/cyclone or persistent rain, that triggers rainfall grid cell events in at least 80% of the total number of grid cells required to trigger a Covered Area Rain Event (CARE) in the respective member country but where no modelled losses are registered.
- Earthquake: Any earthquake event with a body-wave magnitude of greater than 5.0 within an area bounded by Latitude 2° and 41° N and Longitude 97° and 51° W and which generates a peak ground acceleration of at least 0.01 g in one or more grid cells of at least one member country with an EQ policy but which does not produce any modelled government loss.

### **Loss Event**

- Tropical Cyclone: Any tropical cyclone event which produces a modelled government loss of greater than zero in one or more member countries.
- Excess Rainfall: Any rainfall event that triggers a CARE and which produces a Rainfall Index Loss of greater than zero in one or more member countries.
- Earthquake: Any earthquake event which produces a modelled government loss of greater than zero in one or more member countries.

### Triggering Event

- **Tropical Cyclone:** Any tropical cyclone event which produces a modelled government loss sufficiently high to trigger a payout under the Caribbean EQ/TC policy conditions in one or more member countries.
- Excess Rainfall Event: Any rainfall event that triggers a CARE and which produces a Rainfall Index Loss sufficiently high to trigger a payout under the Caribbean XSR policy conditions in one or more member countries.
- Earthquake: Any earthquake event which produces a modelled government loss sufficiently high to trigger a payout under the Caribbean EQ/TC policy conditions in one or more member countries.

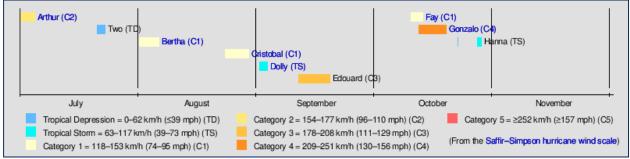
Note that a reportable excess rainfall event depends on the occurrence of a "Covered Area Rainfall Event" or CARE. A CARE is recorded when the total number of grid cells recording rainfall above 75 mm exceeds a threshold (known as the active percentage) specified in a country's XSR policy. For example, a country may be covered by 800 grid cells of which 90 per cent (or 720 cells) must be active (i.e. have rainfall greater than 75 mm) during a rainfall event to trigger a CARE. A CARE ends when the number of cells with rainfall greater than 75 mm falls below the active percentage. The Rainfall Index Loss for the CARE can be calculated only when the rainfall in the contributing cells falls below 75 mm, which may be days after the rainfall event begins.

#### **Reportable Events 2014/15 Policy Year**

During the 2014/2015 policy year, there were a total of 16 reportable events – 4 tropical cyclones, 8 excess rainfall events (1 of which was during Tropical Cyclone Gonzalo) and 4 earthquakes – affecting 13 of the 16 CCRIF member countries. These events are described below. Detailed event briefings for each reportable event are available on the CCRIF website.

#### **Tropical Cyclones**

The 2014 Atlantic Hurricane Season was a slightly below average season that produced nine tropical cyclones, eight named storms – the fewest since 1997 – six hurricanes and two major hurricanes as shown in the figure below.



Timeline of tropical cyclones for the 2014 Atlantic Hurricane Season

The four tropical cyclones which qualified as reportable events under CCRIF tropical cyclone policies were: Bertha, Cristobal, Fay and Gonzalo. The CCRIF countries with TC policies that were affected by wind and storm surge from each of these storms are as follows:

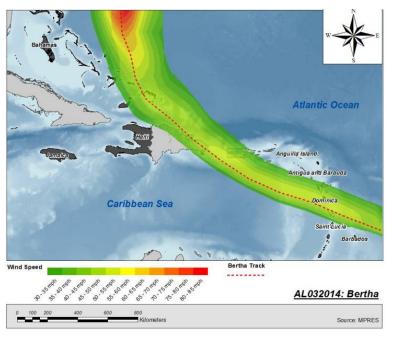
- Bertha: Dominica, Turks & Caicos Islands and The Bahamas
- *Cristobal*: Turks & Caicos Islands and The Bahamas
- *Fay*: Bermuda
- Gonzalo: Anguilla, Antigua & Barbuda and St. Kitts & Nevis

Each of these tropical cyclones will be described below, including information on the CCRIF countries affected as well as the impacts.

#### **Tropical Cyclone Bertha**

On 31 July 2014, the National Hurricane Center (NHC) produced a weather outlook on the development of Tropical Storm Bertha east of the southern Lesser Antilles. By 1500 UTC on 1 August 2014, Bertha was located about 70 miles (110 km) northeast of Barbados with maximum sustained winds of 50 mph (85 km/h).

By 1200 UTC on 3 August 2014, Bertha was located 45 miles (70 km) west of Grand Turk Island moving northwestward at 21 mph (33 km/h) with reduced maximum sustained winds of 45 mph (75 km/h). The 1500 UTC weather outlook reported Bertha strengthening as it moved away from The Bahamas, with maximum sustained winds increasing to 65 mph (100 km/h). Bertha became a category 1 hurricane



#### Map showing the path and wind footprint of Tropical Cyclone Bertha Source: NHC & CCRIF/KAC MPRES

on 4 August 2014. By 0900 UTC on 6 August 2014, Bertha had weakened and was moving quickly northwestward into the north Atlantic.

#### **CCRIF Countries Affected**

Based on the MPRES footprint, the CCRIF member countries affected by at least Tropical Storm force winds from Bertha were Dominica, Turks and Caicos Islands and The Bahamas.

#### **Impacts on CCRIF Countries**

In Dominica, hundreds of people were left without power in the island's eastern region. There was no reported significant damage in Turks and Caicos or The Bahamas.

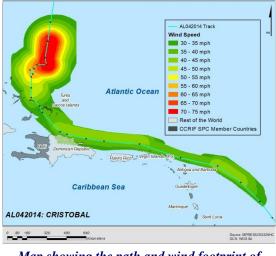
#### **CCRIF Model Outputs – Payout Determination**

Runs of the CCRIF loss model did not generate government losses in the affected countries and therefore no payouts were due.

#### **Tropical Cyclone Cristobal**

On 23 August 2014, the NHC produced a weather outlook on the development of a tropical depression over the Turks & Caicos Islands. By 1020 UTC on 24 August 2014 the depression had strengthened to Tropical Storm Cristobal located about 40 miles (60 km) north northwest of Mayaguana Island.

At 2100 UTC on the same day, Cristobal was moving northward with maximum sustained winds of 45 mph (75 km/h). At this time heavy rainfall was affecting the Turks & Caicos Islands and the southeastern Bahamas. By 2100 UTC on 25 August 2014 Cristobal was moving slowly away from The Bahamas with increased maximum sustained winds of 60 mph (95 km/h). Cristobal became a Category 1 hurricane at 0020 UTC on 26 August 2014 about 660 miles (1,065 km) southwest of Bermuda.



Map showing the path and wind footprint of Tropical Cyclone Cristobal Source: NHC & CCRIF/KAC MPRES

#### **CCRIF Countries Affected**

Based on the MPRES footprint, the CCRIF member countries affected by at least Tropical Storm force winds from Cristobal were the Turks & Caicos Islands and The Bahamas.

#### **Impacts on CCRIF Countries**

Cristobal brought heavy rains to both countries as well as Haiti. There were reports of extensive flooding in low-lying areas in Turks & Caicos and airline flights were cancelled. Two people died in Haiti after being caught up in swollen waterways. There was no reported significant damage in Turks & Caicos or The Bahamas.

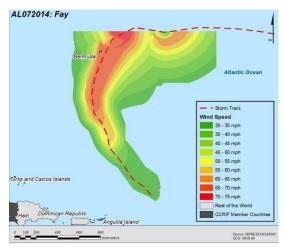
#### **CCRIF Model Outputs – Payout Determination**

Runs of the CCRIF loss model did not generate government losses from wind or storm surge in the affected countries and therefore no payouts were due.

#### **Tropical Cyclone Fay**

On 10 October 2014, the NHC produced a weather outlook on the development of a subtropical depression to the south of Bermuda. By 2100 UTC on the same day, the depression had strengthened to Subtropical Storm Fay, located about 525 miles (845 km) south of Bermuda.

At 1200 UTC on 11 October 2014, Fay transitioned to Tropical Storm status and moved northward with maximum sustained winds of 60 mph (95 km/h). Subsequent advisories showed that outer rain bands began to affect Bermuda within 3 hours of Fay becoming a Tropical Storm.



Map showing the path and wind footprint of Tropical Cyclone Fay Source: NHC & CCRIF/KAC MPRES

The centre of Tropical Storm Fay passed over Bermuda on 12 October at 0900 UTC with maximum sustained winds of 70 mph (110 km/h) accompanied by gusts as high as 82 mph (132 km/h). By 1500 UTC on 12 October 2014 Fay was moving away from Bermuda. Fay became a Category 1 hurricane at 2100 UTC on 12 October 2014 about 290 miles (465 km) northeast of Bermuda.

#### **CCRIF Countries Affected**

Based on the MPRES footprint, Bermuda was the only CCRIF member country affected by at least Tropical Storm force winds from Fay.

#### **Impacts on CCRIF Countries**

Reports indicated that winds from Fay brought down power lines, knocking out power for at least 18,000 homes in Bermuda. Trees were uprooted and road signs brought down. The heavy rains as Fay passed over Bermuda caused major flooding in the airport's terminal building and flights were delayed on 12 October.

#### **CCRIF Model Outputs – Payout Determination**

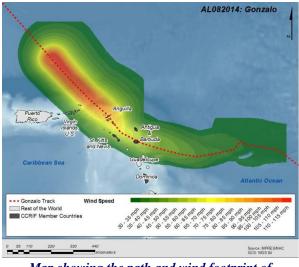
Runs of the CCRIF loss model did not generate government losses from wind or storm surge in Bermuda and therefore no payout was due.

#### **Tropical Cyclone Gonzalo**

On 12 October 2014 at 1730 UTC, the NHC produced a weather outlook on the development of Tropical Storm Gonzalo east of the Leeward Islands.

By 1200 UTC on 13 October 2014, Gonzalo was moving westward through the northern Leeward Islands with maximum sustained winds of 60 mph (95km/h). Tropical Storm force winds were affecting Antigua at this time.

Gonzalo became a Category 1 hurricane at 2100 UTC on 13 October 2014 about 20 miles (30 km) southeast of St. Martin. The centre of Gonzalo passed over Anguilla shortly thereafter with maximum sustained winds of 70 mph (120 km/h).



Map showing the path and wind footprint of Tropical Cyclone Gonzalo Source: NHC & CCRIF/KAC MPRES

#### **CCRIF Countries Affected**

Based on the MPRES footprint, the CCRIF member countries affected by at least Tropical Storm force winds from Gonzalo were Anguilla, Antigua & Barbuda and St. Kitts & Nevis.

#### **Impacts on CCRIF Countries**

In Antigua, winds from Gonzalo reportedly uprooted trees and tore roofs off houses, causing a few minor injuries. Tourists reported that a hotel on the west coast was damaged with a tree falling in at least one guest's room. Gonzalo disrupted a number of airline flights, ferry services and cruises throughout the region.

#### **CCRIF Model Outputs – Payout Determination**

Runs of the CCRIF loss model did not generate government losses from wind or storm surge in the affected countries and therefore no payout was due.

#### Note: TC Gonzalo also generated an Excess Rainfall report.

#### **Excess Rainfall Events**

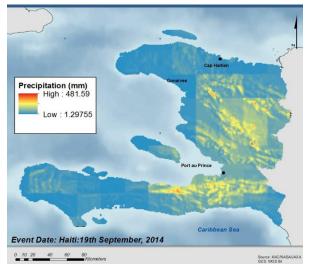
Eight excess rainfall events qualified as reportable events for CCRIF. One of these rainfall events occurred during Tropical Cyclone Gonzalo, which also qualified as a reportable TC event.

The CCRIF countries with XSR policies that were affected by excess rainfall from each of these events are as follows:

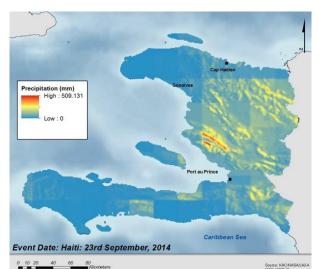
- 19-20 and 23-24 September 2014 rainfall events: Haiti
- Tropical Cyclone Gonzalo rains: Anguilla and St. Kitts & Nevis
- 23 October rainfall event: Grenada
- 17 October rainfall event: Haiti
- 7-8 November Trough System: Anguilla and St. Kitts & Nevis
- 8-12 November Trough System: Haiti
- 21-22 November Trough System: Barbados

#### Haiti Rainfall Events September 2014

Haiti experienced torrential rainfall on 19 and 20 September 2014 and again on 23 and 24 September 2014. This period of rainfall produced two Covered Area Rainfall Events (CAREs) on 19 and 23 September respectively.



Map showing accumulated rainfall in Haiti, 19-20 September 2014 Source: KAC, NASA, JAXA



Map showing accumulated rainfall in Haiti, 23-25 September 2014 Source: KAC, NASA, JAXA

#### **Rainfall Model Outputs**

The Caribbean Rainfall Model uses a 3-day running aggregate of rainfall measurements for Haiti, meaning that the rainfall attributed to a particular day is the total sum of the rainfall on that day itself and the two following days.

For the 19 September CARE, the Caribbean Rainfall Model produced Maximum Aggregate Rainfall of 709.95 mm in the west of Haiti and the maximum number of excess rainfall cells was 9,898 (compared to the 8,274 required to trigger a CARE in Haiti's XSR policy). The 23 September CARE had Maximum Aggregate Rainfall of 433.33 mm, also in the west and the maximum number of excess rainfall cells was 9,494.

#### Impacts on CCRIF Countries

Efforts were made to acquire information regarding damages and actual rainfall measurements on the ground in Haiti. However, due to the fact that these events were not associated with a significant weather system, data from usual CCRIF associates, CIMH, UNECLAC and CDEMA and Haiti's civil protection agency were difficult to access.

#### **CCRIF Model Performance – Payout Determination**

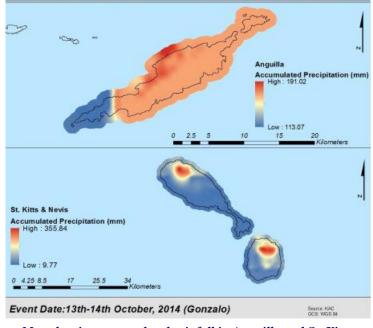
The Rainfall Index Losses calculated for both CAREs were below Haiti's attachment point on its excess rainfall policy and therefore no payout was due.

#### **Tropical Cyclone Gonzalo Rains**

Tropical Storm Gonzalo developed east of the northern Leeward Islands on 12 October at 1:30 pm AST (1730 UTC). It passed through the northern Leeward Islands before impacting Anguilla as a Category 1 hurricane shortly after 5:00 pm AST (2100 UTC) on 13 October 2014. After leaving the eastern Caribbean, Gonzalo strengthened to a Category 4 hurricane over the Atlantic but weakened to Category 2 before passing over Bermuda on 17 October 2014.

#### **CCRIF Countries Affected**

Although TC Gonzalo affected four CCRIF member countries (Anguilla, Antigua & Barbuda, Bermuda and St. Kitts & Nevis), only Anguilla and St. Kitts & Nevis had excess rainfall (XSR) policies for 2014/15. Therefore, this report describes the



Map showing accumulated rainfall in Anguilla and St. Kitts and Nevis, 13-14 October 2014 Source: KAC, NASA, JAXA

losses and damage only in Anguilla and St. Kitts & Nevis due to extreme rainfall as a result of TC Gonzalo.

#### Rainfall Model Outputs

The Caribbean Rainfall Model uses a 2-day running aggregate of rainfall measurements for both Anguilla and St. Kitts & Nevis, meaning that the rainfall attributed to a particular day is the total sum of the rainfall on that day itself and the following day.

The Caribbean Rainfall Model indicated that a CARE was generated in Anguilla starting on 13 October 2014 and ending on 14 October 2014. The model produced Maximum Aggregate Rainfall of 191.02 mm in the north of the island and the maximum number of contributing rainfall cells was 114 – Anguilla's full complement.

In St. Kitts & Nevis, the model produced Maximum Aggregate Rainfall (over the period 12 to 14 October 2014) of 355.84 mm in the north and the maximum number of excess rainfall cells was 57 (compared with 186 required to trigger the country's XSR policy). Therefore, while St. Kitts & Nevis experienced heavy rainfall, a CARE was not registered in that country.

#### Impacts on CCRIF Countries

#### Anguilla

Gonzalo passed directly over Anguilla as a Category 1 hurricane on 13 October 2014. Reports from Anguilla's National Emergency Operations Centre and the Ministry of Economic Development, Investment and Commerce indicated that effects of the rainfall produced by the storm included slight water damage of the roof of the Princess Alexandria Hospital and flooding at resorts, in communities, at the Clayton J. Lloyd International Airport, Public Library and St. Andrew's Anglican Church.

#### St. Kitts & Nevis

A damage assessment report by the Damage Assessment and Needs Analysis Sub-Committee in St. Kitts & Nevis noted minor damage, including two minor rock falls and minor erosion and deposits of silt on some of the island's roads.

#### **CCRIF Model Performance – Payout Determination**

The Rainfall Index Losses calculated for Anguilla's CARE exceeded the attachment point on its excess rainfall policy and a payout of US\$493,465 was made.

For St. Kitts & Nevis, a CARE was not triggered and therefore no Rainfall Index Loss was calculated and no payout was due on St. Kitts & Nevis' excess rainfall policy.

Details on Anguilla are provided in the section on Payouts under CCRIF Policies.

#### **Grenada October Rainfall Event**

On 23 October 2014, Grenada experienced heavy rainfall as a result of a very strong easterly tropical wave that affected the southeastern Windward Islands of the Lesser Antilles. This triggered a CARE according to CCRIF's Caribbean Rainfall Model. This event concluded on 23 October 2014.

Grenada was the only CCRIF member country with an excess rainfall policy that was affected by this rainfall event.

#### **Impacts on CCRIF Countries**

CCRIF did not receive any reports of damage in Grenada.

#### **Rainfall Model Outputs**

The Caribbean Rainfall Model uses a 2-day running aggregate of

rainfall measurements for Grenada. The Caribbean Rainfall Model produced Maximum Aggregate Rainfall of 333.57 mm on 23 October 2014. The maximum number of excess rainfall cells was 275 – compared to 228 required to trigger a CARE.

#### **CCRIF Model Performance – Payout Determination**

The Rainfall Index Loss calculated for Grenada's CARE was below the country's excess rainfall policy attachment point and therefore no payout was due.

#### Haiti October Rainfall Event

On 17 October 2014, strong heating caused convection over the higher terrain of Haiti and, combined with a frontal system from Cuba and The Bahamas, created intense precipitation over the country. Haiti experienced torrential rainfall on 17 to 18 October 2014, which triggered a CARE according to CCRIF's Caribbean Rainfall Model. This event concluded on 20 October 2014.

Haiti was the only CCRIF member country with an excess rainfall policy that was affected by this rainfall event.

#### **Impacts on CCRIF Countries**

CCRIF did not receive any reports of damage in Haiti.

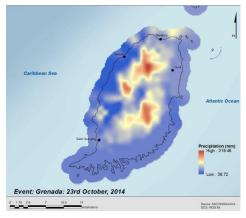
Map showing the accumulated rainfall in Haiti, 17-20 October 2014 Source: KAC, NASA, JAXA

#### Rainfall Model Outputs

The Caribbean Rainfall Model produced Maximum Aggregate Rainfall of 784.44 mm on 17 October 2014. The maximum number of excess rainfall cells was 11,921 – compared with 8,274 required to trigger a CARE in Haiti's XSR policy.

Map showing accumulated rainfall in Grenada, 22-23 October 2014





#### **CCRIF Model Performance – Payout Determination**

The Rainfall Index Loss calculated for Haiti's CARE was below the country's excess rainfall policy attachment point and therefore no payout was due.

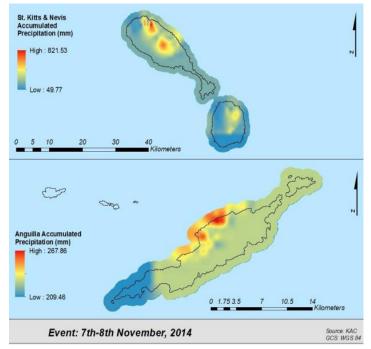
#### Trough System 7-8 November

A low pressure trough, located over the northern Lesser Antilles brought heavy showers and thunderstorms to much of the British and US Virgin Islands and the Lesser Antilles from 7 to 8 November 2014. Anguilla and St. Kitts & Nevis were the only CCRIF member countries with excess rainfall policies that were affected by the trough.

The Caribbean Rainfall Model indicated that CAREs were generated in Anguilla and St. Kitts & Nevis starting on 7 November 2014 and ending on 8 November 2014.

#### **Impacts on CCRIF Countries**

The Nevis Disaster Management Department indicated that walls collapsed as a result of the torrential rain and some cars were damaged. Some roads were damaged and loader trucks had to be used to clear dirt and gravel that had accumulated on others.



Map showing accumulated rainfall in Anguilla and St. Kitts & Nevis, 7 to 8 November 2014. Source: KAC

#### **Rainfall Model Outputs**

For the CARE in Anguilla, the Caribbean Rainfall Model produced Maximum Aggregate Rainfall of 267.86 mm on 7 November (this includes daily rainfall measurements from 7 to 8 November). The maximum number of excess rainfall cells was 114 – Anguilla's full complement.

In St. Kitts & Nevis, the model produced Maximum Aggregate Rainfall of 821.53 mm on 7 November 2014. The maximum number of excess rainfall cells was 214 – compared with 186 required to trigger a CARE in the country's XSR policy.

#### **CCRIF Model Performance – Payout Determination**

The Rainfall Index Losses calculated for Anguilla's CARE exceeded the attachment point on its excess rainfall policy and a payout of US\$559,249 was made.

The Rainfall Index Losses calculated for St. Kitts & Nevis's CARE exceeded the attachment point on its excess rainfall policy and a payout of US\$1,055,408 was made.

#### Details are provided in the section on Payouts under CCRIF Policies.

#### Trough System 8 – 12 November

A low pressure trough moving through the Western Atlantic brought continued rainfall to Haiti from 9 to 11 November 2014. The trough had affected Anguilla and St. Kitts & Nevis a few days earlier, making Haiti the third CCRIF member country with an excess rainfall policy to be affected by the system.

The Caribbean Rainfall Model indicated that a CARE was generated in Haiti starting on 8 November 2014 and ending on 10 November 2014.

Haiti was the only CCRIF member country with an excess rainfall policy that was affected by this rainfall event.

#### **Impacts on CCRIF Countries**

CCRIF did not receive any reports of damage in Haiti.

#### **Rainfall Model Outputs**

The Caribbean Rainfall Model produced Maximum Aggregate Rainfall of 1,592.22 mm on 9 November 2014 (includes rainfall for 9, 10 and 11 November). The maximum number of excess rainfall cells was 16,176.

#### **CCRIF Model Performance – Payout Determination**

The Rainfall Index Loss calculated for Haiti's CARE was below the country's excess rainfall policy attachment point, and therefore no payout was due.

#### Trough System 21-22 November

Interaction of the Tropical Upper Tropospheric Trough and the Inter-Tropical Convergence Zone led to enhanced atmospheric instability and produced moderate to heavy showers with isolated embedded thunderstorms in the Eastern Caribbean on 21 and 22 November 2014.

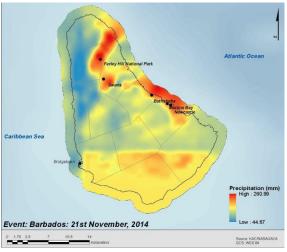
Barbados was the only CCRIF member country with an excess rainfall policy that was affected by the trough.

The Caribbean Rainfall Model indicated that a CARE was generated in Barbados on 21 November 2014.

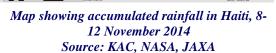
#### **Impacts on CCRIF Countries**

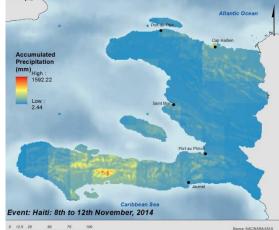
The Department of Emergency Management reported land slippage and considerable flooding of private

residences, damage to roads and exposure of natural gas pipes – all requiring disruption of regular traffic patterns.



Map showing accumulated rainfall in Barbados, 21 to 22 November 2014 Source: KAC, NASA, JAXA





#### **Rainfall Model Outputs**

The Caribbean Rainfall Model uses a 2-day running aggregate of rainfall measurements for Barbados. For the CARE in Barbados, the Caribbean Rainfall Model produced Maximum Aggregate Rainfall of 260.99 mm on 21 November (this includes daily rainfall measurements from 21 and 22 November). The maximum number of excess rainfall cells was 492 – compared with the 403 required to trigger a CARE in Barbados' XSR policy.

#### **CCRIF Model Performance – Payout Determination**

The Rainfall Index Losses calculated for Barbados' CARE exceeded the attachment point on its excess rainfall policy and a payout of US\$1,284,882 was made.

Details are provided in the section on Payouts under CCRIF Policies.

#### **Earthquakes**

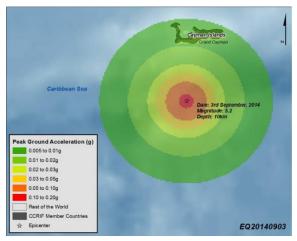
Four earthquakes qualified as reportable events for CCRIF. The CCRIF countries affected by each of these earthquakes are as follows:

- 3<sup>rd</sup> September 2014 earthquakes: Cayman Islands
- **15**<sup>th</sup> **September 2014 earthquake**: Barbados, Dominica, Saint Lucia and St. Vincent & the Grenadines
- 16<sup>th</sup> April 2015 earthquake: Trinidad & Tobago

#### **Cayman Islands Earthquakes September 2014**

A magnitude 5.2 earthquake occurred at 23:34:14 UTC (18:34:14 local time) on 3 September 2014 south of the Cayman Islands. Initial estimates from the US Geological Survey (USGS) locate the epicentre of the event at 18.899°N, 81.317°W, and at a depth of 10 km. Reports from the Cayman Islands indicate that shaking intensities ranged from II to IV on the Modified Mercalli Index (MMI).

Earlier that day, a 5.1 earthquake occurred at 10:01:04 UTC (05:01:04 local time). The epicentre of the event was located at 18.965°N, 81.341°W, and at a depth of 10 km. Reports from the Cayman Islands indicate that shaking intensities from this earthquake also ranged from II to IV on the MMI.





#### **Impacts on CCRIF Countries**

Based on the MPRES footprint, the only CCRIF member country affected by the earthquakes on 3 September 2014 was the Cayman Islands. No significant damage was reported.

#### **CCRIF Model Performance – Payout Determination**

Runs of the CCRIF loss model did not generate any government losses in the Cayman Islands and therefore no payout was due.

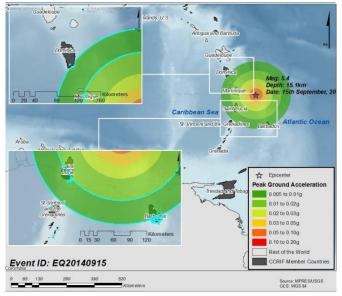
#### Eastern Caribbean Earthquake September 2014

A magnitude 5.4 earthquake occurred at 21:09:08 UTC (17:09:08 local time) on 15 September 2014 east of Martinique. Initial estimates from the USGS located the epicentre of the event at 14.437°N, 60.092°W, and at a depth of 15.1 km.

Reports from Saint Lucia indicated that shaking intensities ranged from II to IV on the MMI.

#### **Impacts on CCRIF Countries**

Based on the MPRES footprint, the CCRIF member countries affected by the earthquake were Barbados, Dominica, Saint Lucia and St. Vincent & the Grenadines. The earthquake was reportedly felt in Saint Lucia and St. Vincent & the Grenadines but not in Barbados or Dominica. Despite the MPRES footprint suggesting that Barbados would have been



Map showing the peak ground acceleration following the magnitude 5. 4 earthquake on 15 September 2014. The 0.005 to 0.01g PGA band (highlighted blue) approximates to shaking that is either not felt or weak. Source: USGS & CCRIF/KAC MPRES

more significantly affected than St. Vincent, the peak ground acceleration in the band affecting Barbados, Dominica and St. Vincent corresponds to perceived shaking that is either not felt or weak, so it is not surprising that there were no reports of shaking in Barbados. There were no reports of damage from any member country.

#### **CCRIF Model Performance – Payout Determination**

Runs of the CCRIF loss did not generate any government losses in the affected countries and therefore no payouts were due.

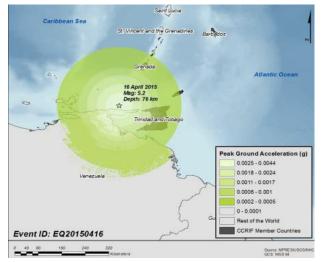
#### Trinidad & Tobago Earthquake April 2015

A magnitude 5.2 earthquake occurred at 02:24:16 UTC (21:24:16 local time) on 16 April 2015 northwest of Trinidad & Tobago. Initial estimates from the USGS located the epicentre of the event at 10.859°N, 62.459°W, and at a depth of 76.5 km.

#### **Impacts on CCRIF Countries**

Based on the MPRES footprint, CCRIF member countries affected by the earthquake on 16 April 2015 were Trinidad & Tobago and Grenada.

The scale of this event was particularly small, with Peak Ground Acceleration values below 0.005g. Values less than 0.005g are correlated with MMI



Map showing the peak ground acceleration following the magnitude 5.2 earthquake on 16 April 2015 Source: USGS & CCRIF/KAC MPRES

values of between II and III. Reports of the shaking ranged from IV in Diego Martin, Trinidad to II in Saint Georges, Grenada – signifying weak shaking with no potential for damage. In Trinidad & Tobago and Grenada, no damage was reported in the press by major news outlets.

#### **CCRIF Model Performance – Payout Determination**

Runs of the CCRIF loss did not generate any government losses in either affected country and therefore no payouts were due.

## PAYOUTS UNDER CCRIF POLICIES 2014-15



Mr. Martin Cox, Director of Finance and Economic Affairs receives a cheque for US\$1,284,882 from CCRIF Board Member Mrs. Faye Hardy at a ceremony on 8 December 2014. At left is CCRIF Board Member Mrs. Desirée Cherebin, who brought remarks on behalf of CCRIF SPC at the ceremony.

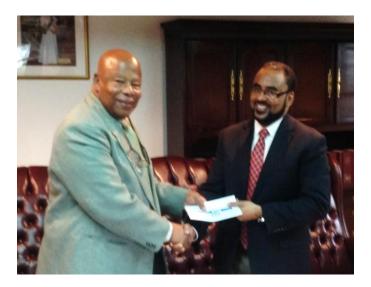
During the policy year 2014/2015, CCRIF made four payouts totalling US\$3.4 million to three member governments – Anguilla, St. Kitts & Nevis and Barbados – on their excess rainfall policies (see table below).

Event	Country Affected	Payout (US\$)
Tropical Cyclone Gonzalo, October 2014	Anguilla	493,465
November Trough, 7-8 November 2014	Anguilla	559,249
November Trough, 7-8 November 2014	St. Kitts & Nevis	1,055,408
Trough System, 21 November 2014	Barbados	1,284,882



L-R: H.E. Christina Scott, Governor of Anguilla; Hon. Hubert Hughes, Chief Minister; Mr. Isaac Anthony CCRIF CEO; Mr. Foster Rogers, Permanent Secretary of Economic Development, Investment, Commerce & Tourism; Mr. Bancroft Battick, Chief Engineer, Ministry of Infrastructure; and Ms. Melissa Meade, Director of Disaster Management – at the cheque presentation ceremony with the Government of Anguilla.

CCRIF organized a special cheque handover ceremony on 29 October 2014 to mark the first payout under a CCRIF excess rainfall policy, where CCRIF CEO, Mr. Isaac Anthony symbolically presented the payment to Anguilla's Chief Minister Hon. Hubert Hughes.

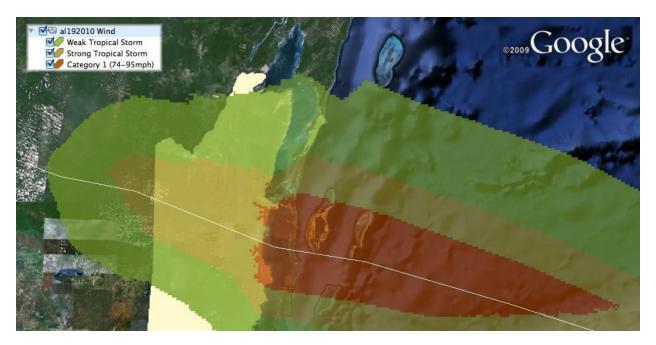


Mr. Isaac Anthony, CCRIF CEO (right) presenting a cheque for US\$493,465 to Anguilla's Chief Minister Hon. Hubert Hughes (left) on 29 October 2014

On 8 December 2014, CCRIF Board Members Mrs. Faye Hardy and Mrs. Desirée Cherebin participated in a ceremony to present the payment to the Government of Barbados from the 21 November Trough System under its excess rainfall policy. Barbados was the only CCRIF member country with an excess rainfall policy that was affected by this system.

Mr. Martin Cox, Director of Finance and Economic Affairs, stressed the importance of the payout to the Government: *"This contribution to the Treasury comes at a good time and will no doubt help us recover from the impacts of these rains. The funds will go into the Consolidated Fund but we will arrange for the Ministry of Public Works to be able to use the resources for necessary repair work."* 

## **CCRIF's Services and Tools**



#### **CCRIF Real-Time Forecasting System**

CCRIF makes the Real-Time Forecasting System (RTFS) available to member countries and other users 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. The CCRIF RTFS is a storm impact forecast tool which provides users with real-time hurricane hazard and impact information.

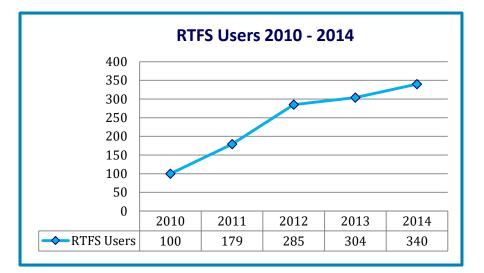
The RTFS tells the user the impact the storm is likely to have when it reaches land – in terms of wind speed over land, storm surge and wave heights along the coast, total expected rainfall, number of people likely to be affected by wind speed category, expected general damage levels, and expected down-time for ports and airports.

By providing advance knowledge of a hurricane's expected site-specific impacts, the RTFS can assist meteorological officers and disaster management coordinators to support effective preparedness and response, decision making about potential evacuations and shelter management, planning for pre-positioning of equipment and supplies, activation of mutual assistance arrangements and management of assets as well as for contingency planning to secure critical infrastructure and operations.

#### Access to the RTFS

At the end of the year, the total number of persons with access to the RTFS was 334, including 34 new accounts created during the 2014 Atlantic Hurricane Season. Access was provided to 15 users from the OECS Commission and to those OECS countries which are not CCRIF members (such as Montserrat and

the British Virgin Islands), under the auspices of the CCRIF-OECS MoU. Registered users include personnel from disaster management departments and meteorological offices, ministries of planning, tourism, agriculture and finance as well as a number of international development agencies working in countries across the region in the area of disaster risk management.



#### Training in the Use of the RTFS

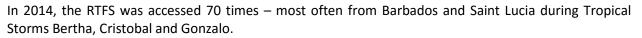
On 28 July 2014, CCRIF offered the course "Understanding and Using the CCRIF Real-Time Forecasting System" in partnership with the Caribbean Institute for Meteorology and Hydrology (CIMH), Kinetic Analysis Corporation and the Caribbean Disaster Emergency Management Agency (CDEMA) via the CCRIF online training platform.

This course is 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.

Twenty-two persons from nine countries participated in the training course, including officers from meteorology and disaster management offices and Saint Lucia's National Reconstruction and Development Unit in the Ministry of Finance, as well as Grenada's AOSIS<sup>1</sup>/climate change contact and members of the OECS Secretariat.

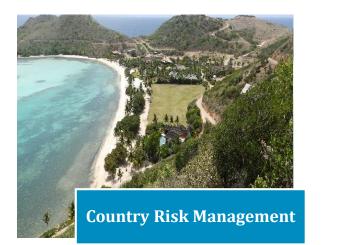
#### RTFS Usage 2014





<sup>&</sup>lt;sup>1</sup> The Alliance of Small Island States

### **New INITIATIVES**





#### Introducing Country Risk Management in the Small States of the Caribbean

During 2014, CCRIF prepared a concept note entitled "Introducing Country Risk Management in the Small States of the Caribbean – The Case for Advancing Risk Governance and Country Risk Officers". This Concept Note will be provided to development partners and regional organizations for consideration towards addressing the need to advance the notion of enhanced country risk management in the Caribbean region.

CCRIF began introducing the concept of country risk officers to stakeholders from as early as 2009, when the facility prepared a paper entitled "Climate Change and Caribbean Economies: Implications, Adaptation and Risk Management", which presented a section on the case for a country risk officer.

Country risk management aims to strengthen the institutional framework in countries for addressing risks, including disaster and financial risks, given the vulnerability of the Caribbean region. This approach will allow treatment of risks in a strategic way that can be addressed across the whole of government in a comprehensive manner.

Essentially, country risk management at the national level considers risk beyond disasters and catastrophes and it follows from the duty of states to protect their people, assets and environment from a range of hazards and risks that they may potentially face. With significant shifts in the frequency, impact and the very nature of risks in the 21<sup>st</sup> century, regional governments are faced with a need to adjust their risk management strategies. Apart from the risks created by climate change, Caribbean countries are subject to a myriad of additional risks, including economic, geopolitical, environmental, societal and technological. A snapshot of what these categories of risks may include is presented in the table below.

#### Examples of Risks that can Impact the Caribbean Region

Economic	Geopolitical	Environmental	Social	Technological
<ul> <li>Food price volatility</li> <li>Oil and gas spikes</li> <li>Fiscal constraints</li> <li>Global fiscal crises</li> <li>Underinvestment in infrastructure</li> </ul>	<ul> <li>International terrorism</li> <li>Transnational crime and corruption</li> <li>Global governance gaps</li> <li>Conflicts between countries</li> </ul>	<ul> <li>Natural hazards</li> <li>Climate change impacts</li> <li>Drought, land degradation and desertification</li> <li>Biodiversity loss</li> <li>Loss of freshwater</li> <li>Air pollution</li> </ul>	<ul> <li>Pandemics</li> <li>Infectious diseases (e.g. Ebola, H1N1 etc.)</li> <li>Chronic diseases (e.g. diseases of the circulatory system, cancers etc.)</li> <li>Migration</li> <li>Aging populations</li> </ul>	<ul> <li>Data fraud/loss</li> <li>Emergence of nanotechnology risks</li> </ul>

Whilst many national policies being developed by countries in the region are taking sustainability issues into account there is still considerable scope for further work in integrated risk management to reduce negative impacts from these various types of risks.

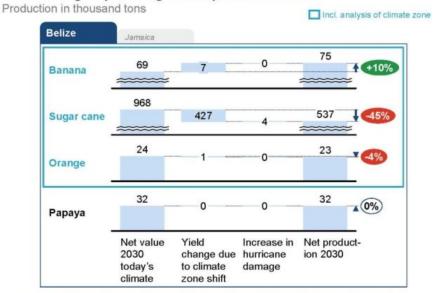
#### **Agriculture Risk Insurance**



Based on the Beneficiary Assessment and Stakeholder Assessments of CCRIF conducted in 2011 and 2014 respectively, member governments have indicated the desire for CCRIF to develop an insurance product for the agriculture sector – addressing not only excess rainfall and wind damage but also drought conditions. Stakeholders indicated interest for an agriculture product at three levels: sovereign (akin to the current TC, EQ, XSR policies), individual (akin to the LPP), and organization/community (for example, for agriculture/crop organizations, farming communities and/or cooperatives).

The work in this area takes on greater significance especially when one considers the fact that the agriculture sector makes important contributions to GDP in many Caribbean countries and importantly, it is more а significant source of employment and a key contributor to rural development in the region. Countries in the region often suffer significant losses to their agriculture sectors due to tropical storms (wind) and excess rainfall on the one hand and drought on the other. Furthermore, the impacts on the sector are likely to increase due to climate change.

Climate change impact on agriculture production in Belize



The Economics of Climate Adaptation Study, led by CCRIF along with other regional partners in 2010, indicated that potential changes in agriculture net production volumes (in 2030 compared with 2009) range from -45% (sugar cane in Belize) to +10% (banana in Belize) due to climate zone shift. The analysis also showed that the change in severity of hurricanes has the potential of increasing damage ratios for all countries and crops. Strategic Objective 2 To Enhance Capacity for Disaster Risk Management and Climate Change Adaptation



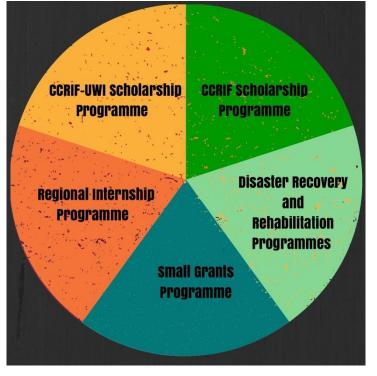
Under Strategic Objective 2, CCRIF supports its members in the development and implementation of strategies for disaster risk management and adaptation to climate change. CCRIF also ensures that its support for disaster risk management in the region builds on existing mechanisms, institutional frameworks, tools and capacities. CCRIF accomplishes this objective primarily through the implementation of its Technical Assistance Programme.

## ENHANCING CAPACITY FOR DISASTER RISK MANAGEMENT AND CLIMATE CHANGE ADAPTATION



To advance work in the area of capacity building for disaster risk management and climate change adaptation, CCRIF launched its Technical Assistance (TA) Programme in 2009. It is designed to provide an ongoing mechanism for grant support within the Caribbean region for capacity building initiatives and the development and implementation of projects that have a strong potential for improving the effectiveness of 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.



#### **CCRIF-UWI Scholarship Programme**



CCRIF-UWI (University of the West Indies) postgraduate scholarship winners 2014/15, Sherryann Prowell (3<sup>rd</sup> right) and Ronn Sullivan (2<sup>nd</sup> right) with, from left, Mr. Clement Iton, UWI Registrar, Mrs. Faye Hardy and Mrs. Desirée Cherebin, CCRIF Board Members, Mr. Milo Pearson, Chairman of CCRIF, and Mr. Isaac Anthony, CCRIF CEO.

Through the CCRIF-UWI Scholarship Programme, CCRIF provides scholarships to post-graduate and undergraduate students who are pursuing study at the University in areas related to disaster management at all three campuses. The value of each post-graduate scholarship is US\$11,000 and each undergraduate scholarship US\$8,000. The scholarship recipients in 2014 are shown in the table below.

<b>Recipient/Country</b>	Degree Programme & Campus		
UWI Postgraduate Recipients			
Ronn Sullivan –	MSc Natural Resource and Environmental Management - Climate Change,		
Guyana	Cave Hill, Barbados		
Sherryann Prowell –	MSc Natural Resource and Environmental Management - Climate Change,		
Guyana	Cave Hill, Barbados		
UWI Undergraduate Recipients			
Vanesa Zulema Ayala –	BSc Civil with Environmental Engineering, St. Augustine, Trinidad & Tobago		
Belize			
Christina Salina –	BSc Civil with Environmental Engineering, St. Augustine, Trinidad & Tobago		
Trinidad & Tobago			
Shavel Watson –	BSc Geology / Science and Technology, Mona, Jamaica		
Jamaica			

#### **CCRIF Scholarship Programme**

## CCRIF scholarship recipients conduct research on topics that advance CCRIF's mandate within the Caribbean

The CCRIF Scholarship Programme provides up to four scholarships per year for study in master's programmes in approved fields at universities in the United States, United Kingdom and Canada as well as at regional universities (other than UWI). This replaced the Extra-Regional Scholarship Programme, which started in 2010 and provided scholarships at institutions outside of the Caribbean. The CCRIF-UWI Scholarship Programme remains as a special collaboration between the two entities.

The CCRIF Scholarship Programme provides scholarships for citizens of CARICOM member countries and CCRIF member countries wishing to obtain a master's degree in select areas related to disaster risk management at a university in the Caribbean, UK, USA or Canada. The areas eligible for the scholarships include:

- (Catastrophe) Risk Management
- Property/Casualty Insurance
- Meteorology
- Other hazard/disaster related disciplines
- MBA with a major in Risk Management and/or Insurance or a related field

Scholarships are valued up to a maximum of US\$40,000 (for extra-regional universities) or US\$20,000 (for Caribbean institutions) and are awarded to applicants who demonstrate academic excellence, are involved in or work in the field of risk/disaster management or sustainable development in the Caribbean and have a record of broader community involvement. All scholarship recipients are bonded to work in the Caribbean for a period of three years immediately after completion of their studies. Also, recipients of CCRIF scholarships undertake to conduct research for their thesis in areas that are of interest to CCRIF and its efforts to build capacity in disaster risk management in the Caribbean.

The scholarship recipients in 2014 were:

- Viola Pascal from Jamaica to pursue an MSc in Risk, Crisis & Disaster Management at the University of Leicester, UK
- Delamine Andrew from Antigua & Barbuda to pursue an MSc in Sustainable Development (Climate Change & Risk Management) at the University of Exeter, UK

DISSERTATIONS/ THESES BY CCRIF SCHOLARSHIP RECIPIENTS 2010 - 2015		
An Analysis of the Role of Insurance Risk Management in the Minimization of Catastrophic Risks and Disaster Management	Barriers to Flood Mitigation among Households in St. Mary, Jamaica	
The Climate Justice Dialogue: Lessons for the Climate Regime from Aid Arrangements	Mangrove Management in Guyana: A Case of Climate Compatible Development?	
An Assessment of Tropical Cyclone Rainfall Characteristics within the Eastern Caribbean	Analyzing the responses of the financial services sector to climate change risks in the Caribbean: A case study of Antigua and Barbuda	

#### **CCRIF Regional Internship Programme**

The CCRIF Regional Internship Programme was launched in March 2015. It is designed to provide opportunities for students who have specialized in the areas of disaster risk management, environmental management, actuarial science, geography, climate studies and other similar areas to be assigned to regional organizations where their educational experience can be enhanced through practical work assignments.

In this initiative, CCRIF has partnered with a range of organizations who have agreed to act as host organizations. These include national disaster management agencies as well as:

- Caribbean Disaster and Emergency Management Agency (CDEMA)
- Caribbean Development Bank (CDB)
- Caribbean Community Climate Change Centre (CCCCC)
- Caribbean Institute of Meteorology and Hydrology (CIMH)
- University of the West Indies (UWI)
- Institution of Structural Engineers (IStructE) Caribbean Regional Group

The programme is expected to benefit both the participating organizations and the interns.

#### Benefits For Interns: Young Caribbean Professionals and Students

- Promote academic, career and/or personal development
- Provide experiential learning thereby ensuring that interns gain vital skills and experience that they will be able to use throughout their professional career
- Expose interns to the work being undertaken in the region in the areas of disaster risk management, climate change and risk transfer

#### Benefits For Regional Organizations

- •Provide temporary employees with special and new/cutting-edge skills and knowledge
- •Assist with the organizations' work towards achieving their targets.

The programme is open to citizens of CARICOM and/or CCRIF member countries who are graduates of a recognized university. The interns should have completed a course of study in any one of the following key areas: disaster risk management, environmental management, meteorology, climate studies, civil engineering, management studies with a focus on risk management, environmental economics, geography, geology, civil engineering, risk management and actuarial science.

#### **CCRIF Small Grants Programme**



The CCRIF Small Grants Programme was launched in March 2015. It provides financing for small projects by non-governmental organizations (NGOs), community-based organizations (CBOs) and charity organizations in local communities across CCRIF member countries and/or CARICOM member countries.

The Small Grants Programme is designed to:

- Enhance capacities at the local community level and raise awareness of disaster risk management and climate change
- Enhance partnerships, cooperation, coordination and collaboration mechanisms in support of disaster risk management (DRM)
- Support best practices in community development
- Ensure replicability of good practices at the local level and contribute to innovation in DRM practices at the local level

All projects submitted for consideration must be of relevance to CCRIF and its regional mandate and agenda and can therefore be inclusive of, but not limited to, projects related to the following broad areas:

- Disaster risk management
- Engineering
- Climate change adaptation
- Training and other capacity building initiatives
- Environmental management initiatives that will directly have an impact on reducing community vulnerability

Each project should fall within the range of US\$5,000 to US\$25,000. All registered NGOs, CBOs, charity or non-profit organizations, national disaster coordinating bodies and universities operating within local communities across CCRIF member countries in the Caribbean and/or CARICOM member countries are eligible for funding. Organizations directly funded from state budgets such as departments or agencies within government ministries are not eligible for funding.

#### **Contributions to Post-Hurricane Sandy Recovery**



Sandy Port Beach in The Bahamas before work began

Construction of the sea wall

The sea wall at 98% completion

After the passage of Hurricane Sandy in October 2012, CCRIF provided funding to the governments of Jamaica, Haiti and The Bahamas for the implementation of post-Sandy recovery activities. Small-scale, community-level projects aimed at increasing community resilience were implemented.

The three projects were:

- Jamaica rehabilitation of the residential Muirton Boys Home which was damaged by the hurricane
- Haiti soil conservation of flooded arable lands around the Bainet River
- The Bahamas construction of a new sea wall at Sandyport Beach

The projects in Jamaica and Haiti were completed in early 2014. The project in The Bahamas was 98% completed by May 2015. This sea wall will increase the coastal defences in that area.



# Strategic Objective 3 To Sustain Corporate and Financial Integrity



Strategic Objective 3 focuses on CCRIF's efforts to enhance its management framework to facilitate sustained growth and addresses both decision making and governance with a focus on high quality internal controls towards enhancing efficiencies and reducing the risk of business interruption.
Governance for CCRIF is important because the facility believes that it must be fully accountable to its members, stakeholders and supporting donors. This objective also focuses on CCRIF's work to maintain its strong capital base and to continuously review its investment policy to be able to be flexible in negotiating advantageous rates to its members and to be able to retain its claims paying capacity.

## **CONVERSION TO A SEGREGATED PORTFOLIO COMPANY**

In 2014, CCRIF changed its corporate structure to become a segregated portfolio (SP) company and changed its name to CCRIF SPC. This change facilitates the offering of new products and expansion into new geographic areas and will broaden the scope of CCRIF activities in enhancing disaster risk management. The new structure allows for total segregation of risk, but still provides opportunities to share operational functions and costs and to maximize the benefits of diversification.

CCRIF product offerings are provided through the following segregated portfolios (SPs):

- CCRIF SPC on behalf of Caribbean EQ/TC SP: Providing earthquake and tropical cyclone policies for Caribbean governments
- CCRIF SPC on behalf of Caribbean XSR SP: Providing excess rainfall policies for Caribbean governments
- CCRIF SPC on behalf of Loan Portfolio Cover SP: Providing Loan Portfolio Cover policies for financial institutions in Caribbean countries

Early in the next fiscal year, the following SP will be created for the Central America portfolio:

• CCRIF SPC on behalf of Central America SP: To provide earthquake and tropical cyclone policies for Central American governments



CCRIF SPC issued 28 annual policies for EQ/TC to 15 CARICOM countries for the 2014/2015 policy/financial year plus 8 policies for the new XSR product. The year's premium income totalled US\$19.5 million, for tropical cyclone and earthquake coverage. CCRIF's aggregate exposure for policies written was US\$653 million, with the tropical cyclone to earthquake aggregate split being close to 60:40. Annual premium from the new XSR policies added up to almost US\$3.6 million, covering an aggregate exposure of more than US\$36 million in member countries.

CCRIF SPC for Caribbean EQ/TC retained US\$25 million and purchased an additional US\$115 million of reinsurance capacity above layer 1 to support the claims paying capacity of the facility (see figure at right). Reinsurance was purchased from the international reinsurance markets, including Swiss Re, Munich Re, Partner Re, Hanover Re, Everest, SCOR and Lloyd's of London syndicates Hiscox, Catlin, Antares and Beazley. US\$30 million capacity was provided by the World Bank's first ever Cat bond which was placed parallel to layers 2 & 3 of the traditional reinsurance programme. The top of the reinsurance structure, at US\$145 million, provided claims paying capacity for aggregate annual losses with an approximately 1-in-526 chance of occurring.

Risk Transfer Structure, 2014/15 Return Period Amount (\$ M) 526 145.0 LAYER 3 TRAD \$62.8M CAP MARKE \$30M 20.4 60.0 LAYER 2 TRAD \$22.2M 8.9 LAYER 1 TRAD 30.0 \$5M 7.8 25.0 CCRIF RETENTION \$25M 1.6 0.0

## **CCRIF'S FINANCIAL STABILITY**

CCRIF SPC (Caribbean EQ/TC SP)

CCRIF SPC's total capital at risk for 2014/15 comprised the retention of US\$25 million within the risk transfer programme and a further ~US\$11 million above the reinsurance programme up to the 1-in-1,000-year loss of ~US\$156 million. The claims paying capacity of CCRIF for the 2014/2015 policy year was thus significantly greater than the modelled aggregate annual loss with a 1-in-1,000 chance of occurring, thus comfortably falling within CCRIF's guidelines for financial security and was substantially better than any of its peers in either the public or private sectors.

#### World Bank Cat Bond

In July 2014, the World Bank (International Bank for Reconstruction and Development) issued its first ever catastrophe ("cat") bond. This US\$30 million transaction is the first of the World Bank's newly created Capital-at-Risk Notes Program and addresses earthquake and tropical cyclone risk in the 16 Caribbean CCRIF member countries.

The new cat bond provides three years of annual aggregate protection for hurricanes and earthquakes affecting the Caribbean CCRIF member countries, using the same triggers and measurements as the facility's underlying parametric insurance model. The placement agent for the cat bond was Guy Carpenter (GC Securities) and the co-structuring agents for CCRIF were GC Securities and Munich Re. Swiss Re Capital Markets acted as advisor to the World Bank.

Ms. Madelyn Antoncic, Vice President and Treasurer at the World Bank, asserted that, "With this first transaction under the Capital-at-Risk Notes Program, CCRIF benefits from access to the highly competitive prices offered by the cat bond market as well as from the efficiency of using this program. At the same time, cat bond investors benefit from exposure to new perils."

## **CCRIF'S ACCOUNTABILITY**

CCRIF is committed to the principles of transparency and accountability and conducts regular reporting against its strategic objectives. Each quarter during this year, a report was presented to the Board that described the progress made by CCRIF under each strategic objective, compared to the targets set for 2014-2015 in the CCRIF Strategic Plan.

Independent audits are another important component of CCRIF's accountability framework and KPMG commenced an internal audit of CCRIF in May 2015. The facility will address issues raised by the audit once it is completed.

CCRIF was selected for the award for Best Latin America Reinsurance Deal at Reactions 2015 Latin America Awards held in Miami, USA on 26 May 2015. Reactions Information Services is the leading source of information for executives in the global reinsurance market. The award was made for CCRIF's new catastrophe bond.

> CCRIF CEO, Mr. Isaac Anthony with award for Best Latin America Reinsurance Deal

### **CCRIF** RECOGNITION



## **STAKEHOLDER ASSESSMENT OF CCRIF**

## Our Stakeholders Say...

CCRIF has definitely increased the importance accorded to risk management by our country's policy makers.

- Antigua and Barbuda



St. Kitts and Nevis has made it through tough fiscal times and has kept paying premiums and the current situation is better now so we will continue to purchase CCRIF policies. We can't be penny wise and pound foolish. Given the history of hurricane damage and reduced international assistance for damage, it is important to keep CCRIF's coverage. St. Kitts and Nevis has seen the enormous financial benefits to be gained from participating in CCRIF.



St. Kitts and Nevis

CCRIF has brought a level of comfort to those countries affected by rainfall events recently with timely payouts which have allowed them to respond to the needs of those affected and buffer negative socioeconomic impacts thus increasing their resilience.

– Trinidad and Tobago

The Region has benefitted from the scholarships offered to UWI

tity

students. These graduates are a driving force for development – the scholarships have led to 25 persons so far who have the ability to impact communities, organizations and lead to capacity development in the region.

- University of the West Indies

CCRIF is an integral partner in disaster risk management in the region as it has placed a series of innovative risk transfer options in the domain of Caribbean Governments.

STATES AND INCOME.

— Barbados

100 224

The support from CCRIF and the Caribbean Development Bank through its immediate response facilities is the most visible support for disaster risk.

- St. Vincent and the Grenadines



CCRIF is always listening to countries in the region and trying to adjust its policies to meet their needs. It is willing to modify its model and is always looking to develop new products. CCRIF is a dynamic agency.

-St. Kitts and Nevis

In November 2014 - January 2015, CCRIF conducted a stakeholder assessment of CCRIF's performance during 2011-2014. This exercise built on a beneficiary assessment of CCRIF prepared by the World Bank in 2011, which was used in the preparation of the World Bank's Implementation Completion Report on CCRIF as well as to inform CCRIF's Strategic Plan for 2012-2015. This stakeholder assessment was conducted to determine how to enhance CCRIF's operations to meet the needs of its members and stakeholders and was used to inform CCRIF's current Strategic Plan for 2015-2018.

Forty-nine persons from 15 CCRIF member countries as well as the British Virgin Islands and Guyana participated in the assessment. They included representatives of national stakeholder organizations (ministries of finance, disaster management organizations and meteorology offices), regional partner organizations and international development partners as well as scholarship recipients.

The main findings are presented below.

- 90% of respondents stated that CCRIF was an integral part of disaster risk management in the Caribbean.
- 58% indicated that CCRIF has played a critical role in increasing the importance of DRM. Also, the occurrence of hazard events and their socio-economic impacts have also led to increased importance being placed on DRM.
- 42% indicated CCRIF has played a key role in bringing different key players together to discuss DRM. Many respondents felt that CCRIF was one of many initiatives that were increasing collaboration among the different sectors.
- 82% felt that CCRIF is providing a good service to Caribbean governments. Some persons questioned the value of countries' membership in CCRIF when they had not received a payout.
- 90% understood that CCRIF payouts were not intended to cover the entire loss of government revenue but only 38% believed that most stakeholders in their countries (or the region) understood. Some believed that the level of understanding had increased over the past few years as a result of more discussion and dissemination of information such as the hazard event reports.
- 71% of the respondents who were from countries that had received a payout felt that the payment was adequate.
- 61% of national stakeholders indicated that in a situation of fiscal constraint, the country could reduce its coverage or possibly opt for no coverage. 13% indicated that there would be no effect from fiscal constraints, meaning that those countries would purchase CCRIF policies regardless of any fiscal constraints.

#### **Main Recommendations from Stakeholders**

- Provide coverage for other hazards, especially drought, and for the agriculture sector.
- Facilitate the finalization and sharing of country risk profiles.
- Link good disaster reduction practices with reduced CCRIF premiums for individual countries.
- Use CCRIF's good relationships with ministries of finance to increase investment in disaster management initiatives and to foster a more holistic approach to disaster management, with increased focus on reducing vulnerability and building resilience.
- In collaboration with other development partners, finalize pilot results of the ECA study and widen to other countries; disseminate data and results to facilitate wide use.
- Implement more disaster management projects on the ground.
- Engage stakeholders from the private sector whose work involves disaster risk management.
- Provide more online training, forums, webinars, etc.
- Implement a programme that benefits disaster management agencies directly.

Strategic Objective 4 To Deepen Understanding and Knowledge of Catastrophe Risk and the Solutions CCRIF Provides



Strategic Objective 4 focuses on facilitating and promoting informed decision making through communications, training programmes and activities directed at its members, key stakeholders, policymakers, and the general public towards deepening the understanding of catastrophe risk. This is done by continuing to develop and disseminate a range of informational products centred on areas related to disaster risk, risk transfer solutions and climate change as well as organizing capacity building initiatives (workshops, training programmes etc.). Additionally, this objective focuses on increasing understanding of parametric insurance and how CCRIF policies work.



### **PUBLICATIONS**



CCRIF develops and disseminates materials to national, regional and international stakeholders to facilitate better understanding of CCRIF and its products and services as well as issues related to disaster risk management, climate change adaptation and sustainable development.

During the policy year 2014/15, CCRIF produced over 20 publications including:

- CCRIF Annual Report 2013-2014
- CCRIF Technical Series Volume 3: A Collection of Papers ... Showcasing the Work of CCRIF Scholarship Recipients 2010 2012
- Understanding CCRIF A Collection of Questions and Answers (March 2015 Edition)
- RTFS Training Materials
- 2015-2016 Policy Renewals country briefings Understanding Ex-Ante Disaster Financing, CCRIF Parametric Policies and the Relationship with Fiscal and Economic Policy Training Manual
- CCRIF Strategic Plan 2015-2018

A short video about CCRIF also was produced for the CCRIF COSEFIN MoU signing.

Also, CCRIF contributed an article, "What are the advantages of the transferrable CAT bond lite?" for *Insurance-Linked Securities for Institutional Investors 2015* (April 2015).



Examining the evolution insurance-linked securities markeplace to assess the impact of capital inflow on yields and how CVI bond exclusion and private transactions can safeguard market longovity.

#### **CCRIF Publications 2009/10 - 2014/15**

Over the period 2009/10 – 2014/15 CCRIF produced a total of 260 publications as follows:

External	Technical	Reports	Communications	Press
Publications			Products	Releases
17	70	85	42	46

- External Publications articles written by CCRIF but published in external or non-CCRIF publications
- Technical materials technical booklets, training materials, technical studies, country risk profiles, rainfall risk profiles, etc.
- Reports annual, semi-annual and quarterly reports; hazard event reports; meeting reports; RTFS reports; strategic plans etc.
- Communications products newsletters, flyers, brochures, videos, advertorials, posters, fact sheets etc.
- Press releases

CCRIF publications are available on the CCRIF website - www.ccrif.org.

## **CCRIF PUBLIC RELATIONS AND MEDIA**

An important component of CCRIF's communication is interaction with the media to raise their awareness and in turn to engage them in spreading "the CCRIF message". CCRIF accomplishes this through regularly issuing press releases and hosting media events. As CCRIF becomes better known, it is increasingly being recognized as a best practice example in areas related to insurance, disaster risk management and climate change adaptation and is being referenced in articles written in a wide range of international and regional journals and news outlets.

Some of the headlines making the news throughout the year are presented below.

2014 - 2015 CCRIFHE	ADLINES	
Caribbean, Central America formalise partnership for catastrophe risk insurance The Gleaner (Jamaica)	CCRIF SPC Opens to Central American Countries, Nicaragua First to Join Insurance News	
La Prensa de Honduras Intelligent Insurer TCI News Now	CCRIF moves to improve disaster risk management in Caribbean	
Insurance Journal	CDEMA gets € 20m grant from EU Jamaica Observer	
World Bank bond aims to soften blow of natural disasters Business Day Live	World Bank Readying Pandemic Insurance Fund RiskMarketNews	
Jamaica not yet ready for Hurricane Season Jamaica Gleaner	facebook twitter linked in my slipcase RSS feeds	
Nepal earthquake rocks its economy CBS Moneywatch	CCRIF welcomes Central American states Reactions	
Jamaican Government moves to reduce fiscal exposure to disaster	Gov't gets \$2.5m for excess rainfall Nation News (Barbados)	
Insurance offers new hope to Africa in fight against drought and natural disasters	How the Caribbean Fared at the UN Climate Summit in New York Caribbean Journal	
The Independent	New Development Financing Models for Africa	
Extreme weather events second on 2015 global risk list: World Economic Forum	- A Look Back at ADF9 AllAfrica	
Re/insurance and ILS have important role in climate change battle Artemis blog	Folks in the Caribbean Should Be Hoping for a Hurricane Future Tense	
Federation to Benefit from World Bank Reinsurance Assistance St. Kitts & Nevis Observer	World Bank Group Launches First Country Partnership Strategy in Suriname in 30 years	
Australia urged to support Pacific 'climate insurance scheme' Insurance Business	World Bank Group	

During the year, CCRIF hosted three media events:

- Media launch for the Regional Internship and Small Grants programmes in March 2015
- Handover of a cheque for US\$493,465 to the Government of Anguilla following the triggering of its excess rainfall policy due to the passage of Tropical Cyclone Gonzalo in October 2014

• Handover of a cheque for US\$1,284,882 to the Government of Barbados following the triggering of its excess rainfall policy following the passage of a trough that affected the island in November 2014

## Launch of the CCRIF Regional Internship and Small Grants Programmes – 23 March 2015



CCRIF Chairman, Mr. Milo Pearson welcomed participants at the launch of the CCRIF Internship and Small Grants Programmes

"We are all here today... looking to find solutions through partnerships to influence change," stated Mr. Pearson.



Mr. Glyne Alleyne from the Bajan Firefighters Network commending CCRIF on launching the Small Grants Programme that will benefit non-governmental organizations in their efforts to create disaster-resilient communities



Ms. Andria Grosvenor, Alliance and Cooperation Services Manager at CDEMA discusses the Regional Internship Programme with Mr. Isaac Anthony, CCRIF Chief Executive Officer

## **CCRIF** WEBSITE AND SOCIAL MEDIA



#### www.ccrif.org | pr@ccrif.org | **f** CCRIF SPC

The CCRIF website – and increasingly CCRIF's social media channels, Facebook and Twitter – are important tools used to communicate with our stakeholders. These enable CCRIF to provide updates about CCRIF as well as other issues related to disaster risk management and climate change. Also, they allow stakeholders to contact CCRIF with queries and requests for more information about issues of importance to them.

During this fiscal year, the CCRIF website was accessed 18,290 times from over 150 countries. Each year,

the number of visits to the website increases - this year, the number of visits increased by approximately 38 per cent over the previous year. The United States continues to be the country with the most visitors, with approximately 20 per cent of the total visits. followed Jamaica as the Caribbean country which accessed the site most often, with almost 10 per cent of the visits.



Visits to the website increased by a little over 120 per cent over the period 2009/10 to 2014/15.

With respect to CCRIF's Facebook footprint, Facebook Analytics and Insights shows that CCRIF currently has over 2,000 followers and over 45,000 persons on average view and read CCRIF posts. The facility also regularly uses Twitter to post information and has 229 followers.

### **CONFERENCES AND FORA**



CCRIF CEO, Mr. Isaac Anthony and members of the CCRIF Board and Team participated in conferences and meetings hosted by various regional and international organizations to share information about the facility and also to participate in discussions related to disaster risk management and climate adaptation in the Caribbean and other regions in the world. During this policy year, discussions were focused on the expansion of CCRIF to include Central American countries as well as to promote the idea of CCRIF expansion to other regions. The range of events attended by the CCRIF Board, CEO and Team and the topics presented is shown in the table below.



Date / Location	Event	CCRIF
		Speech/Presentation
June 2014 Barbados	CDEMA Inaugural pre-Council symposium: "Integration of Climate Change Adaptation and Disaster Risk Management"	The Role of CCRIF in Climate Change Adaptation and Disaster Risk Reduction
June 2014 Montego Bay, Jamaica	UNFCCC Second Forum of the Standing Committee on Finance Session: "Mobilizing Private Finance for Adaptation"	The Role of Insurance in Adaptation Finance in the Caribbean the CCRIF Experience

March 2015

Miami, USA

Berlin, Germany

May 2015

Date / Location	Event	CCRIF
		Speech/Presentation
July 2014	Workshop: What Next?	Panel Discussions:
London, UK	Small Island Developing States	Financial Protection from Tools to
	(SIDS) Working Groups on	Strategies
	Collective Action and Next Steps	Planning and Designing Climate and
		Disaster Resilient Investments
July 2014	Understanding Risk Haiti	CCRIF: A Natural Catastrophe Risk
Haiti	Session: "Determinants of an	Insurance Mechanism
	insured economy: Financial	for Caribbean Nations
	protection and risk transfer"	
July 2014	2014 Comprehensive Disaster	CCRIF and the Regional CDM Strategy
Barbados	Management (CDM) Programming	
	Consultation: "Partner	
	Collaboration for Strategy Implementation"	
September 2014	UNSG 2014 Climate Summit	The role of CCRIF in supporting
New York, USA	Multi-lateral and Multi-	resilience, adaptation and disaster risk
New TOIR, OSA	Stakeholder Session on 'Resilience,	reduction within the context of risk
	Adaptation and DRR'	transfer
September 2014	Henderson Insurances Catastrophe	CCRIF SPC – A Model for Disaster Risk
St. Maarten	Risk Insurance Conference	Management and Climate Adaptation
September 2014	"After the Storm – A Retrospect of	The Role of Insurance in Adaptation
Cayman Islands	Ivan" Symposium (hosted by	Finance in the Caribbean
,	CDEMA and Cayman Islands	
	Hazard Management)	
October 2014	Inaugural Meeting of the OECS	
British Virgin Islands	Council of Ministers of	
	Environmental Sustainability	
November 2014	Caribbean Central America Action	Panel discussion: Mitigation - Being
Miami, USA	(CCAA) 38 <sup>th</sup> Annual Conference on	prepared - Best practices in disaster
	the Caribbean and Central America	coordination
December 2015	Caribbean Association of Actuaries	CCRIF: A Natural Catastrophe Risk
Barbados	24 <sup>th</sup> Annual Conference:	Insurance Mechanism for Caribbean
	Navigating the Changing	Nations
	Landscape of Risk	
March 2015	Captive Insurance Companies	CCRIF SPC - A Captive for All Seasons
Orlando, USA	Association (CICA) 2015	
	International Conference	

Reinsurers Forum (organized by

G7 Stakeholder Conference on

Reducing risks, insuring losses,

Climate Risk Insurance:

increasing resilience

Panel discussion: Climate insurance -

from idea to implementation

CCRIF)

## TRAINING 2014 - 2015



During this fiscal year, CCRIF implemented training initiatives to improve understanding of CCRIF's products, tools and services as well as concepts related to risk transfer and parametric insurance and the linkages between debt sustainability, the fiscal policy framework and natural hazards.

#### **RTFS Training**

As discussed in the section on CCRIF's Real-Time Forecasting System (Strategic Objective 1), this year, CCRIF offered the course "Understanding and Using the CCRIF Real-Time Forecasting System" in partnership with the Caribbean Institute for Meteorology and Hydrology, Kinetic Analysis Corporation and Caribbean Disaster Emergency Management Agency via the CCRIF online training platform. Twenty-two persons from nine countries participated in the training course. This course has been offered annually since 2011 and a total of 159 persons have participated in the training during the period 2011-2014.

## Understanding Ex-Ante Disaster Financing, CCRIF Parametric Policies and the Relationship with Fiscal and Economic Policy

Each year, CCRIF engages with primary contacts in member countries regarding renewal of policies and scaling up coverage. During the past three years, these discussions have also included examination of the new excess rainfall coverage option. To help our members in their decision-making process, CCRIF prepares detailed country briefings, outlining different scenarios for possible policy options. This year, a training component was included for these key stakeholders in the finance ministries and disaster management and meteorology agencies. The training focused not only on the specific elements of CCRIF's parametric policies but also on the broader context of how risk transfer (e.g. catastrophe insurance), as part of a country's disaster management and climate adaptation strategies, can support its fiscal and

economic policy framework. This training was supported by a manual specifically prepared for this purpose: *Understanding Ex-Ante Disaster Financing, CCRIF Parametric Policies and the Relationship with Fiscal and Economic Policy.* The training was presented in both face-to-face and online meetings to eight member countries.

#### **Other Training Interventions**

CCRIF takes every opportunity to raise awareness among its stakeholders about CCRIF's role in securing adequate coverage against natural hazards and how this contributes to improving hazard and climate resilience. The meeting hosted by the CDB and CCRIF for international development partners and regional organizations in March 2014 provided a forum to discuss these issues within the context of the work programmes and plans of these organizations. The meeting included presentations by CCRIF and the CDB on the impacts of natural hazards on the Caribbean and fiscal sustainability for disaster risk management, CCRIF's insurance products and technical services for capacity building in DRM and the case for upscaling coverage through CCRIF.



Dr. Justin Ram of the Caribbean Development Bank delivered a presentation at the CCRIF-CDB Donors meeting on "Linkages between fiscal and debt sustainability and natural disasters"

# Strategic Objective 5 To Expand Membership



Strategic Objective 5 focuses on expanding membership within the Caribbean and beyond the region. CCRIF seeks to define strategies to effectively enable non-members in the Caribbean to become members of the facility as the region as a whole adopts comprehensive disaster management principles and guidelines. In this policy year, CCRIF focused on finalizing the process to bring Central American countries on board as members of CCRIF. This initiative is aimed at improving affordability of high quality sovereign catastrophe risk transfer associated with tropical cyclones, earthquakes, and/or excess rainfall for COSEFIN and CARICOM countries and to enhance the capacity of ministries of finance for developing and implementing disaster risk financing and insurance strategies.

## **MEMBERSHIP EXPANSION**

#### **Expansion of CCRIF into Central America**

On 18 April 2015, the Council of Ministers of Finance of Central America, Panama and the Dominican Republic (COSEFIN) and CCRIF SPC signed a Memorandum of Understanding that enables Central American countries to formally join the facility to access low cost, high quality sovereign catastrophe risk insurance. COSEFIN was formed to discuss issues related to information, harmonization, alignment, development and coordination of fiscal policies and has seven member governments.



Signing of COSEFIN - CCRIF MoU:

L to R: Mr. Martin Portillo – Executive Director of COSEFIN, Mr. Jorge Familiar - Vice President of the World Bank for Latin America and the Caribbean, H.E. Ivan Acosta – Minister of Finance of the Republic of Nicaragua, Mr. Milo Pearson – CCRIF Chairman and Mr. Isaac Anthony – CCRIF CEO

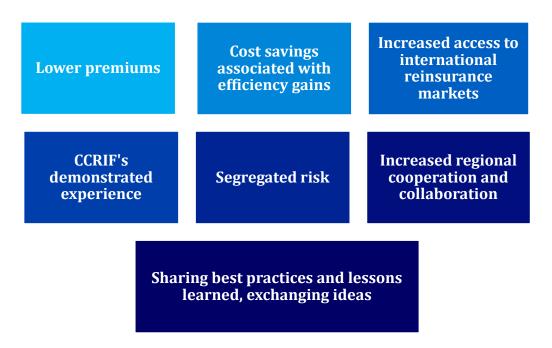
Also at the signing ceremony, the Government of Nicaragua signed a CCRIF Participation Agreement, thus becoming the first Central American member of CCRIF SPC.

The restructuring of CCRIF into a segregated portfolio company (SPC) in 2014 facilitates the offering of new products (for example the excess rainfall product) and expansion into new geographic regions. This means that countries and regions are now able to partner with CCRIF through a segregated-cell approach, whereby each region will be grouped into legally separated pools of risk (or 'segregated cells') allowing for separation of risk management operations (e.g. pricing, policy format) for different regions but with bundled access to the reinsurance market.

This means that for each cell in the segregated portfolio, CCRIF will aggregate disaster risks for that cell/region, achieving the kind of risk diversification and spreading that its members would not be able to attain on their own. By pooling countries' risks into a single diversified portfolio, CCRIF is able to provide insurance at the minimum price possible. CCRIF also brings economies of scale for administration and purchase of reinsurance, and its capital enables CCRIF to retain some risk, thus reducing the reinsurance burden.

# **Benefits of Joining CCRIF**

Joining CCRIF was identified by COSEFIN and Central American governments as the most cost-effective option for delivering low-cost high-quality catastrophe risk insurance, with the purpose of financing emergency costs, because of the following:



# **Discussions with other Regions and Countries**

During the year, CCRIF engaged in discussions with countries, regions and international development partners towards assessing the possibility of regions such as the South Pacific partnering with CCRIF through the segregated-cell approach. CCRIF also had extensive discussions with countries in the Caribbean that are currently not members of CCRIF, but which have expressed an interest in becoming members. Chief among these were St. Maarten and Guyana.



# Strategic Objective 6 To Deepen Strategic Partnerships



Strategic Objective 6 focuses on developing and maintaining strategic alliances to support capacity building initiatives, education, research and development, knowledge sharing and providing tools for greater proactive disaster preparedness and management. CCRIF continues to work with regional organizations to develop work plans and implement projects and programmes to advance common goals and to reduce existing vulnerabilities in the small island and coastal states of the region. This objective also focuses on maintaining working relationships with international development partners and seeking new donor partners to expand CCRIF's ability to meet current and future members' needs.

# **PARTNERSHIPS AND STRATEGIC ALLIANCES**



L-R: Mr. Isaac Anthony, CCRIF CEO; Mr. Milo Pearson, CCRIF Chairman and Dr. Wm Warren Smith, President, Caribbean Development Bank at the CDB-CCRIF Strategic Donor Meeting in support of CCRIF SPC, held in March 2015 in Barbados

CCRIF remains committed to developing and strengthening partnerships with key entities in the region through the development of Memoranda of Understanding (MoUs) and collaborative programmes to improve disaster risk management, increase climate resilience and reduce vulnerabilities in the Caribbean.

# **CCRIF** has Agreements/MoUs with:

- Caribbean Community Climate Change Centre CCCCC
- Caribbean Disaster Emergency Management Agency CDEMA
- Caribbean Institute for Meteorology and Hydrology CIMH
- Inter-American Development Bank IDB
- Organisation of Eastern Caribbean States OECS
- United Nations Economic Commission for Latin America and the Caribbean UNECLAC
- University of the West Indies UWI
- University of the West Indies Seismic Research Centre UWI SRC

# **Caribbean Community Climate Change Centre**

The objective of the collaboration between CCRIF and the Caribbean Community Climate Change Centre (CCCCC) is to assist the governments of Caribbean states in understanding the risks of climate change to the economies and people of the region and in identifying possible cost-effective adaptation measures to support greater resilience at the local, national and regional level. The main area of focus is to expand the Economics of Climate Adaptation (ECA) study conducted by CCRIF, CCCCC and other partners in 2012<sup>2</sup> beyond the original eight pilot countries, throughout the region. This work may be done in collaboration with the Inter-American Development Bank.



# Caribbean Disaster Emergency Management

# Agency

The objective of the MoU between CCRIF and the Caribbean Disaster Emergency Management Agency (CDEMA) is to strengthen and expand mutual efforts towards the promotion of Comprehensive Disaster Management (CDM) within the Caribbean region and specifically, to support the Enhanced Regional Comprehensive Disaster Management Framework (2014-2024).

This year, work under the MoU focused on the development of CDEMA disaster readiness accreditation standards. These readiness indexes will be derived from a customization of the biennial CDM Audit Tool, which will allow for the systematic and independent assessment of country preparedness, identification of areas of need for capacity building in countries for reducing vulnerability, as well as identifying the level of assistance that may be required for a country once they are affected by a hazard, so as to facilitate proactive planning for response. The specific component of value to CCRIF relates to the building code standards and indicators. The audit tool was administered in Trinidad & Tobago in May 2015 and will be administered in Jamaica and Belize early in the next year. The feasibility of CCRIF premium discounts for CCRIF member countries with CDEMA accredited disaster readiness will be explored, along with other incentive mechanisms such as regional awards and recognition activities.

Under the MoU, CCRIF will continue to support the Caribbean Conference on Comprehensive Disaster Management, now scheduled as a biennial conference, with the next one being held in November-December 2015.

The work plan also includes exploration of revising the CCRIF country risk profiles at scales which can be used for development planning purposes – while at the same time retaining their suitability as a basis for countries' CCRIF policies.

# **Caribbean Institute of Meteorology and Hydrology**

The first MoU with the Caribbean Institute of Meteorology and Hydrology (CIMH) signed in 2008 has ended and during this policy year, discussions continued towards developing a new MoU and workplan.

<sup>&</sup>lt;sup>2</sup> For more information on this study, see the publication, <u>Enhancing the Climate Risk and Adaptation Fact Base</u> <u>for the Caribbean</u> on the CCRIF website.

CIMH plays a critical role in the annual RTFS training organized by CCRIF and co-facilitated the 2014 RTFS training session. The new MoU would focus on excess rainfall modelling support and storm forecasting capacity building including the DEWETRA and RTFS systems.

# **Inter-American Development Bank**

The objective of the MoU with CCRIF and the Inter-American Development Bank (IDB) was to expand on the ECA study in the Latin American and Caribbean regions – to embed the ECA methodology in the two regions in support of enhanced decision making in light of climate change impacts.



Under the MoU, the IDB produced a study: "Understanding the

Economics of Climate Adaptation in Trinidad and Tobago". Moving forward, CCRIF and IDB are exploring incorporation of the ECA expansion within the "Climate Smart Island Programme" being implemented by the IDB in 2015.

# **Organisation of Eastern Caribbean States**

The work under the MoU between CCRIF and the Organisation of Eastern Caribbean States (OECS) Commission focused on:

- Capacity development of the OECS Commission and member states in the use of forecasting tools including the CCRIF Real-time Forecasting System (RTFS)
- Promotion of the multi-hazard risk reduction methodology and the model community disaster risk reduction framework for vulnerable and low-income communities
- Application of assessment tools to prioritize and benchmark communities based on vulnerability to prevalent hazards, social and economic conditions and the inclusion of climate change aspects where appropriate

In July 2014, CCRIF and regional partners conducted RTFS training for OECS countries and OECS Commission personnel as part of the annual RTFS training for all CCRIF members. Also, during this policy year, work began to assess and prioritize vulnerable communities in Saint Lucia to develop strategic action plans for addressing vulnerabilities identified in the three most vulnerable communities.

Early in the next fiscal year, a stakeholder consultation will be held to review the assessment, to inform the development of community disaster management work plans and provision of assistance in the implementation these plans.

# United Nations Economic Commission for Latin America and the Caribbean

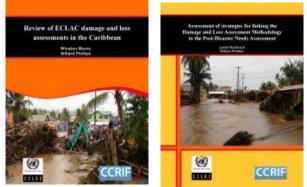
The 2014-2015 work plan under the United Nations Economic Commission for Latin America and the Caribbean (ECLAC) MoU focused on two main areas. The first area was undertaking reviews and analyses of ECLAC's post-disaster economic impact evaluations for hurricanes in CCRIF member countries – to determine how the original post-event economic impact estimates made by ECLAC compare to CCRIF model based loss estimates and to actual economic impacts six to nine months after an event. The second area focussed on undertaking a study on the cumulative macro socio-economic impacts of natural disasters on the Caribbean since 2004 – to explore potential collaborative synergies, for example in the area of convergence of model-based approaches (such as those used by CCRIF) with immediate post-

disaster on-the-ground loss estimates (such as those undertaken by ECLAC) and longer term reviews of actual economic performance/impact.

Two reports were produced:

- *Review of ECLAC Damage and Loss Assessments in the Caribbean*
- Assessment of Strategies for Linking ECLAC's Damage and Loss Assessment Methodology to the Post-Disaster Needs Assessment

The work plan for the next year will incorporate findings from these reports and will include



development of guidelines for estimating environmental losses associated with disasters and updating ECLAC Damage and Loss Assessment (DaLA) training materials.

# **University of the West Indies**

The focus of the MoU with the University of the West Indies (UWI) is the administration of the CCRIF-UWI Scholarship Programme (see Strategic Objective 3 above). However, there is scope for further expansion and collaboration on activities, for example, offering courses or modules on CCRIF-related issues such as parametric insurance in the context of disaster risk management and climate change adaptation.

# **University of the West Indies Seismic Research Centre**

The MoU with the Seismic Research Centre (SRC) at the UWI St. Augustine campus (in Trinidad & Tobago) was aimed at establishing and maintaining a new accelerometric network in the Eastern Caribbean and Jamaica to enhance the capability for identifying and mitigating seismic risk in the Caribbean. The strong-motion instruments in this network extended and enhanced the small network of strong ground motion sensors that already operated in CARICOM states. The project was completed in May 2015. A total of 15 strong motion sensors were installed – or existing sensors updated – in Grenada, Barbados, Saint Lucia, Dominica, Antigua, St. Kitts, Nevis, St. Vincent and Jamaica.



Strong Motion Station at Long Mountain, Jamaica







Installation of Strong Motion Station behind the disaster office at Fort Frederic, Grenada

# **STRATEGIC DONOR MEETING**

In March 2015, the Caribbean Development Bank and CCRIF hosted the second Strategic Donor Meeting in support of CCRIF. The meeting included representatives of international development organizations and regional partners and provided an update on CCRIF's activities and new developments since the first meeting in 2013. Most importantly, the meeting provided an opportunity to align CCRIF's activities with donor and partner activities and their country work programmes.



L-R: Mr. Seibert Frederick - Manager, Public Investment Unit, Ministry of Finance and Economic Affairs Barbados; Dr. Wm Warren Smith – President, CDB; Mr. Milo Pearson -Chairman, CCRIF; and Mr. Isaac Anthony -CEO, CCRIF

L-R: Ambassador Dr. Lutz Görgens - Ambassador of the Federal Republic of Germany to Trinidad, Barbados and the OECS; Ms. Evelyn Wayne - Director, Economic Policy and Development, CARICOM; and Mrs. Desirée Cherebin - CCRIF Board Member



Ms. Ana Campos Garcia - Sr. Disaster Risk Management Specialist, World Bank and Mr. Isaac Anthony

Dr. Wm Warren Smith in discussion with Mr. Timothy Antoine - CCRIF Board Member

# Audited Financial Statements 2014/15



# FINANCIAL STATEMENTS

# FOR THE YEAR ENDED MAY 31, 2015

# FINANCIAL STATEMENTS

# FOR THE YEAR ENDED MAY 31, 2015

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#### **INDEPENDENT AUDITOR'S REPORT**

#### To the Board of Directors of CCRIF SPC

We have audited the accompanying financial statements of CCRIF SPC (the "Company") on pages 2 - 25, comprising CCRIF SPC ("Core"), EQ/TC SP, XSR SP and LPC SP which comprise the balance sheets as at May 31, 2015, and the related statements of operations, changes in shareholder's equity and cash flows for the year then ended, and notes, comprising a summary of significant accounting policies and other explanatory information.

#### Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

#### Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with International Standards on Auditing. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

#### Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Company, comprising CCRIF SPC ("Core"), EQ/TC SP, XSR SP and LPC SP, at May 31, 2015, and their financial performance and cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America.

owaterhause

November 18, 2015

PricewaterhouseCoopers, 5<sup>th</sup> Floor Strathvale House, P.O. Box 258, Grand Cayman, KY1-1104, Cayman Islands, T: +1 (345) 949 7000, F: +1 (345) 949 7352, www.pwc.com/ky

# **BALANCE SHEET**

### AT MAY 31, 2015

#### (Expressed in United States dollars)

	Core	EQ/TC SP	XSR SP	LPC SP
	\$	\$	\$	\$
ASSETS				
Cash and cash equivalents (Note 4)	5,291,842	12,047,100	1,238,998	355,391
Investments, at fair value (Note 5)	52,719,537	36,890,394	18,051,515	4,696,659
Development costs (Note 17)	388,333	-	-	-
Accrued interest	363,393	421,263	196,642	49,099
Due from Core Company (Note 18)	-	13,741,767	127,574	-
Due from Segregated Portfolios (Note 18)	13,940	-	2,546,538	-
Prepaid expenses	90,624	-	-	-
Total assets	58,867,669	63,100,524	22,161,267	5,101,149
LIABILITIES AND SHAREHOLDER'S EQUITY Liabilities				
Accounts payable and accrued expenses	393,119	48,608	68,972	10,940
Unrealized losses on forward contracts (Note 9)	204,430	323,095	140,118	42,922
Due to Core Company (Note 18)	-	-	-	13,940
Due to Segregated Portfolios (Note 18)	13,869,341	2,546,538	-	-
Income from parametric contracts received in advance				
(Note 7)	-	1,425,000	106,250	-
Participation fee deposits (Note 8)	-	13,420,008	-	-
Total liabilities	14,466,890	17,763,249	315,340	67,802
Shareholder's equity				
Share capital (Note 10)	1,000	-	-	-
Non-voting redeemable preference shares (Note 10)	-	1	1	1
Share premium (Note 10)	119,000	42,499,999	24,999,999	4,999,999
Retained earnings / (accumulated deficit)	44,280,779	2,837,275	(3,154,073)	33,347
Total shareholder's equity	44,400,779	45,337,275	21,845,927	5,033,347
Total liabilities and shareholder's equity	58,867,669	63,100,524	22,161,267	5,101,149

Approved for issuance on behalf of the Board of Directors of CCRIF SPC by:

Milo Pearson	November 18, 2015
Director	Date
Desiree Cherebin	November 18, 2015
Director	Date

# STATEMENT OF OPERATIONS

# FOR THE YEAR ENDED MAY 31, 2015

# (Expressed in United States dollars)

	Core	EQ/TC SP	XSR SP	LPC SP
-	\$	\$	\$	\$
Operating income				
Income from parametric insurance contracts (Note 2) Discounts awarded on parametric insurance contracts	-	18,357,500	3,591,250	-
(Note 2)	-	(5,340,288)	(1,044,712)	-
Expenses on parametric reinsurance contracts (Note 2)	-	(9,281,279)	(3,000,000)	
Net income / (loss) on parametric contracts	-	3,735,933	(453,462)	-
Ceding commissions on parametric reinsurance contracts	-	218,478	-	
Total operating income	-	3,954,411	(453,462)	
Operating expenses				
Claims paid on parametric insurance contracts (Note 12) Claims recovered on parametric insurance contracts	-	-	3,393,004	-
(Note 12)	-	-	(893,004)	-
Brokerage and facility supervisor fees	686,072	111,394	25,000	
Total operating expenses	686,072	111,394	2,525,000	
Net operating income / (loss)	(686,072)	3,843,017	(2,978,462)	-
Other income and expenses				
Investment income (Note 13)	2,292,664	629,163	299,690	37,847
Income from Donor Funds (Note 6)	83,544	-	-	-
Amortisation of development costs (Note 17)	(55,667)	-	-	-
Technical assistance expenses	(428,341)	-	-	-
Central American Initiative (Note 11)	(108,903)	-	-	-
Segregated portfolio rental fees (Note 18)	1,900,000	(1,500,000)	(400,000)	-
Administrative expenses (Notes 14 and 15)	(1,421,732)	(134,905)	(75,301)	(4,500)
Net income / (loss) for the year	1,575,493	2,837,275	(3,154,073)	33,347

#### STATEMENT OF CHANGES IN SHAREHOLDER'S EQUITY

#### (Expressed in United States dollars)

<u>Core</u>	Share <u>Capital</u>	r	Ion-voting edeemable erence shares		Share <u>premium</u>	Retained earnings	Total
Balance at May 31, 2014 Distribution to Shareholder Net income for the year	\$ 1,000 - -	\$	- - -	\$	119,000 - -	\$115,205,286 (72,500,000) <u>1,575,493</u>	\$ 115,325,286 (72,500,000) <u>1,575,493</u>
Balance at May 31, 2015	\$ 1,000	\$		\$_	119,000	\$ <u>44,280,779</u>	\$ <u>44,400,779</u>

<u>EQ/TC SP</u>		Share <u>Capital</u>		Non-votir redeemab <u>preference sh</u>	le	Share <u>premium</u>	Retained earnings		<u>Total</u>
Balance at May 31, 2014 Preference shares issued Net income for the year	\$		- -	\$	- 1 -	\$ 42,499,999 	\$ 2,837,275	\$	42,500,000 2,837,275
Balance at May 31, 2015	\$ <u></u>		_	\$	1	\$ <u>42,499,999</u>	\$ 2,837,275	\$ <u></u>	45,337,275

<u>XSR SP</u>	Share <u>Capital</u>		Non-voting redeemable <u>preference share</u>	<u>s</u>	Share <u>premium</u>	Accumulated <u>deficit</u>	Total
Balance at May 31, 2014 Preference shares issued Net loss for the year	\$	- - -	\$		\$ 	\$	\$ 25,000,000 (3,154,073)
Balance at May 31, 2015	\$	_	\$ <u> </u>		\$ <u>24,999,999</u>	\$ <u>(3,154,073</u> )	\$ 21,845,927

LPC SP	Share <u>Capital</u>		Non-voting redeemable <u>preference shares</u>		Share <u>premium</u>		Retained <u>earnings</u>		Total	
Balance at May 31, 2014 Preference shares issued Net income for the year	\$	- - -	\$	- 1 -	\$	- 4,999,999 -	\$	33,347	\$	5,000,000 <u>33,347</u>
Balance at May 31, 2015	\$		\$	1	\$	4,999,999	\$	33,347	\$	5,033,347

In the year ended May 31, 2015, the Shareholder capitalized the Caribbean EQ/TC SP ("EQ/TC SP"), Caribbean XSR SP ("XSR SP"), and Loan Portfolio Cover SP ("LPC SP") in the amounts of \$42,500,000, \$25,000,000 and \$5,000,000, respectively. This capitalization was funded from a distribution from the Core.

Consideration for the distribution and capitalization was a combination of short term investments and securities. The market values of the investments at the date of distribution/contribution were used to establish a cost basis for the securities within each of Segregated Portfolios' investment portfolios.

# STATEMENT OF CASH FLOWS

# FOR THE YEAR ENDED MAY 31, 2015

# (Expressed in United States dollars)

Core	EQ/TC SP	XSR SP	LPC SP
\$	\$	\$	\$
1,575,493	2,837,275	(3,154,073)	33,347
-	(410,000)	-	-
3,363,870	533,303	253,303	87,919
(1,111,674)	127,043	71,032	32,109
380,375	323,095	140,118	42,923
55,667	-	-	-
(41,781,564)	(8,703,397)	(3,924,882)	(1,162,407)
			867,910
	.,,	- , - ,	· · · -
	-	-	-
681 953	(421,263)	(196.642)	(49,099)
	(121,203)	(1)0,012)	(19,099)
,	_	_	_
	18 608	68 972	10,940
		,	10,740
		100,230	-
		(127, 574)	13,940
15,655,401			13,940
	2,340,338	(2,340,338)	
13,404,292	5,883,320	(5,698,489)	(122,418)
(245,000)	-	-	
(245,000)	-	-	-
(13 579 076)	_	_	_
(13,577,070)	6 163 780	6 937 /87	477,809
	0,105,700	0,757,407	+77,007
(13,579,076)	6,163,780	6,937,487	477,809
(419,784)	12,047,100	1,238,998	355,391
5,711,626	-	-	
5,291,842	12,047,100	1,238,998	355,391
3,345,048	280,708	144,995	25,738
	\$ 1,575,493 1,575,493 1,575,493 (1,111,674) 380,375 55,667 (41,781,564) 50,681,962 1,422,284 568,691 681,953 66,948 124,423 (174,529) (2,475,000) (13,830,008) 13,855,401 - 13,404,292 (245,000) (245,000) (245,000) (13,579,076) - (13,579,076) (419,784) 5,711,626 5,291,842	\$         \$           1,575,493         2,837,275           1,575,493         2,837,275           1,575,493         2,837,275           1,575,493         2,837,275           3,363,870         533,303           (1,111,674)         127,043           380,375         323,095           55,667         -           (41,781,564)         (8,703,397)           50,681,962         7,488,877           1,422,284         -           681,953         (421,263)           66,948         -           124,423         -           (174,529)         48,608           (2,475,000)         1,425,000           (13,830,008)         13,830,008           13,830,008)         13,830,008           13,855,401         (13,741,767)           -         2,546,538           13,404,292         5,883,320           (245,000)         -           (13,579,076)         -           -         6,163,780           (13,579,076)         6,163,780           (13,579,076)         6,163,780           (419,784)         12,047,100           5,711,626         -	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$

#### STATEMENT OF CASH FLOWS

#### FOR THE YEAR ENDED MAY 31, 2015

#### (Expressed in United States dollars)

\*Non-cash decrease in participation fee deposits in EQ/TC SP was utilized to settle certain premium payments from parametric contracts in EQ/TC SP (Note 8).

\*\* Financing activities include the following cash and non-cash components. The non-cash distributions/contributions represent distributions/ contributions in specie of marketable investment securities which were distributed/contributed at fair market value on the date of distribution/ contribution.

	Core	EQ/TC SP	XSR SP	LPC SP
	\$	\$	\$	\$
Cash distribution/contribution	(13,579,076)	6,163,780	6,937,487	477,809
Non-cash distribution/contribution	( <u>58,920,924</u> )	36,336,220	18,062,513	4,522,191
Total	( <u>72,500,000</u> )	42,500,000	25,000,000	<u>5,000,000</u>

#### FINANCIAL STATEMENTS

#### FOR THE YEAR ENDED MAY 31, 2015

#### (Expressed in United States dollars)

#### **<u>1.</u>** Incorporation and principal activity

The Company was incorporated as Caribbean Catastrophe Risk Insurance Facility on February 27, 2007 under the laws of the Cayman Islands and obtained an insurance licence under the provisions of the Cayman Islands Insurance Law on May 23, 2007. On May 27, 2014 the Company re-registered as a Segregated Portfolio Company under the name of CCRIF SPC. The Company's sole shareholder is Mourant Ozannes Corporate Services (Cayman) Limited as is trustee (the "Trustee") of the CCRIF Star Trust (the "Trust"). The non-voting redeemable preference shares of each segregated portfolio (Note 10) are also held by the Trust.

The principal activity of the Company, through the establishment of various segregated portfolios (the "Segregated Portfolios"), is to provide catastrophe risk coverage through parametric insurance contracts, specifically relating to tropical cyclones, earthquakes and excess rainfall events ("events"), to certain Caribbean countries ("Participating Countries").

As of May 31, 2015, the Company comprises the general assets (the "Core"), which undertakes no underwriting activities, and three Segregated Portfolios ("SP"s), namely:

- Caribbean EQ/TC SP ("EQ/TC") provides earthquake and tropical cyclone coverage to Caribbean governments
- Caribbean XSR SP ("XSR") provides excess rainfall coverage to Caribbean governments
- Loan Portfolio Cover SP ("LPC") provides loan portfolio coverage to financial institutions in Caribbean countries.

Collectively the Core and SPs are referred to as "CCRIF SPC".

In accordance with the relevant Cayman Islands laws, the assets and liabilities of the Segregated Portfolios are required to be kept separate and segregated from the assets and liabilities of the Core. Further, the assets and liabilities of each Segregated Portfolio are required to be kept segregated, separate and separately identifiable from the assets and liabilities of any other Segregated Portfolio. In the case of insolvency with respect to the general business activities, creditors will be entitled to recourse only to the extent of the assets of the Core. In the case of insolvency with respect to or attributable to a particular Segregated Portfolio, creditors will be entitled to have recourse only to the assets attributable to such Segregated Portfolio; such a claim shall not extend to the assets attributable to the Core or any other Segregated Portfolio.

The Core and SPs all use common service providers, share common processes, accounting systems, control environment, management and apply common accounting policies.

During the year ended May 31, 2015, the Core liquidated its beneficial interest in the Global Managed (7) \$ Fund (a Segregated Portfolio of London & Capital Satellites SPC) which are accordingly no longer consolidated by the Core.

#### 2. Parametric contracts

Each Participating Country determines the level of aggregate coverage and attachment points which are then used to determine their individual premiums. Claims are based on model-derived estimates of government losses generated using a pre-defined and escrowed catastrophe loss model and input data regarding the nature of each physical hazard event, as set out in the "Claims Procedures Manual" (hereinafter the "Claim Payout") and not with reference to actual losses incurred by the respective Participating Countries. Accordingly, Claim Payouts are not triggered by actual losses but rather the occurrence of the specified events within the defined policy parameters.

#### FINANCIAL STATEMENTS

#### FOR THE YEAR ENDED MAY 31, 2015

#### (Expressed in United States dollars)

#### 2. Parametric contracts (continued)

For the 2014/15 policy year (which terminated on May 31, 2015), the combined aggregate coverage limits for all Participating Countries in the EQ/TC SP were \$388 million for tropical cyclone events and \$266 million for earthquake events, respectively.

EQ/TC SP has ceded layers of this exposure to commercial reinsurers and the International Bank for Reconstruction and Development ("IBRD"). The following is a summary of the coverage in the program for the period up to May 31, 2015:

- EQ/TC SP retains all losses up to \$25 million.
- 100% of the next \$120 million of losses are reinsured with quality reinsurers with an A.M. Best rating of at least A and the IBRD.
- EQ/TC SP retains all subsequent losses above \$145 million. The modelled probability of a loss reaching this layer has been indicated to be a 1-in-1,000 year loss event.

XSR SP has ceded layers of this exposure to a commercial reinsurer. The following is a summary of the coverage in the program for the period up to May 31, 2015:

- XSR SP retains all losses up to \$2.5 million.
- 100% of the next \$32.5 million of losses are reinsured with a quality reinsurer with an A.M. Best rating of A+.
- XSR SP retains all subsequent losses above \$35 million. The modelled probability of a loss reaching this layer has been indicated to be a 1-in-1,000 year loss event.

Losses are determined in accordance with the formulae set out in the contracts and are recorded as an expense on occurrence of a covered event. At May 31, 2015, there were no unpaid losses.

LPC coverage has not yet commenced.

#### 3. Significant accounting policies

These financial statements on pages 2-25 have been prepared in accordance with accounting principles generally accepted in the United States of America ("US GAAP") and are stated in United States dollars. A summary of the significant accounting and reporting policies used in preparing the accompanying financial statements is as follows:

<u>Management estimates and assumptions</u>: The preparation of financial statements in accordance with US GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of income and expenses during the reporting period. Actual results could differ from these estimates.

<u>Cash and cash equivalents</u>: Cash and cash equivalents comprise of call accounts with banker and investment custodians.

**Investments:** Investments consist of investments in equities, exchange-traded funds, retail mutual funds, corporate debt securities and short-term investments. Investment securities are traded with the objective of generating profits on short-term differences in market prices; accordingly, investments are classified as trading securities and are measured at fair value.

The fair value of exchange-traded funds is based on quoted market prices. The fair value of equity and fixed income securities are determined based on quoted market prices and/or prices determined using generally accepted pricing models as provided by the investment manager and custodian. The fair value of the retail mutual funds is based on the daily net asset values provided by fund administrators.

#### FINANCIAL STATEMENTS

#### FOR THE YEAR ENDED MAY 31, 2015

#### (Expressed in United States dollars)

#### 3. Significant accounting policies (continued)

Unrealized gains and losses on investments are recorded as a change in fair value in the Statement of Operations. Realized gains and losses on investments are determined on the specific identification method and are credited or charged to the Statement of Operations.

Interest and dividend income is recorded on the accruals basis.

**Forward and futures contracts:** Investment managers are permitted to invest, within prescribed limits, in financial exchange traded futures contracts for managing the asset allocation and duration of the fixed income portfolio. Initial margin deposits are made upon entering into futures contracts and can be made either in cash or securities. During the period the futures contracts are open, changes in the value of the contracts are recognized as unrealized gains or losses by "marking-to-market" on a daily basis to reflect the market value of the contracts at the end of each day's trading. Variation margin payments are made or received, depending upon whether unrealized losses or gains are incurred. When the contracts are closed realized gain or loss is recorded equal to the difference between the proceeds from (or cost of) the closing transaction and the basis in the contracts. Futures contracts are valued based on exchange traded prices.

Investment managers are also permitted to invest in forward foreign exchange contracts to hedge or obtain exposure to foreign currency fluctuations in its securities which are denominated in currencies other than the U.S. dollar. These contracts are also valued daily using the "marking-to-market" method and are recognized in the balance sheet at their fair value, being the unrealized gains or losses on the contracts as measured by the difference between the forward foreign exchange rates at the dates of entry into the contracts and the forward rates at the reporting date. Open forward and futures contracts are valued using Level 1 and Level 2 inputs (as defined in the accounting policy below), respectively.

Realized gains and losses and movement in unrealized gains and losses on both futures and foreign currency forward contracts are recorded as a component of investment income in the Statement of Operations.

**Over-the-counter ("OTC") options:** Investment managers are permitted to purchase and write OTC options to hedge against or obtain exposure to changes in the value of equities. OTC options are generally valued based on estimates provided by broker dealers or derived from proprietary/external pricing models using quoted inputs based on the terms of the contracts. Movement in unrealized gains and losses on OTC options are recorded as a component of investment income in the Statement of Operations. Open OTC options are valued using Level 2 inputs (as defined in the fair value measurements accounting policy below).

**Other Options and Warrants:** Investment managers are permitted to purchase exchange-traded options and warrants to hedge against or obtain exposure to changes in equity price. When an option or warrant is purchased, an amount equal to the premium paid is recorded as an investment and is subsequently adjusted to the current market value of the option or warrant purchased. Premiums paid for the purchase of options or warrants which expire unexercised are treated as realized losses on derivative contracts. If a purchased put option is exercised, the premium is subtracted from the proceeds of the sale of the underlying security, foreign currency or commodity in determining whether gain or loss have been realized on derivative contracts. If a purchased call option or warrant is exercised, the premium increases the cost basis of the purchased security, foreign currency or commodity.

Movement in unrealized gains and losses on other options and warrants are recorded as a component of investment income in the Statement of Operations. Open options and warrants are valued using Level 2 inputs (as defined in the fair value measurements accounting policy below).

#### FINANCIAL STATEMENTS

#### FOR THE YEAR ENDED MAY 31, 2015

#### (Expressed in United States dollars)

#### 3. Significant accounting policies (continued)

**Fair value measurements:** US GAAP establishes a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). The three levels of the fair value hierarchy under US GAAP are as follows:

- Level 1 Inputs that reflect unadjusted quoted prices in active markets for identical assets or liabilities that CCRIF SPC has the ability to access at the measurement date;
- Level 2 Inputs other than quoted prices that are observable for the asset or liability either directly or indirectly, including inputs in markets that are not considered to be active;
- Level 3 Inputs that are unobservable.

Inputs are used in applying the various valuation techniques and broadly refer to the assumptions that market participants use to make valuation decisions, including assumptions about risk. Inputs may include price information, volatility statistics, specific and broad credit data, liquidity statistics, and other factors for debt securities. The fair value of investments in common stocks and exchange-traded funds is based on the last traded price. Net Asset Values ("NAV") are used to estimate the fair value of investments in non-exchange traded mutual funds. Investments in debt securities are valued based on observable inputs for similar securities and may include broker quotes.

A financial instrument's level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. However, the determination of what constitutes "observable" requires significant judgment by the investment managers and custodians. The investment manager and custodian consider observable data to be market data which is readily available, regularly distributed or updated, reliable and verifiable, not proprietary, and provided by independent sources that are actively involved in the relevant markets.

The categorization of a financial instrument within the hierarchy is based upon the pricing transparency of the instrument and does not necessarily correspond to the investment advisors' perceived risk of that instrument. Investments are initially recorded at cost on trade date (being the fair value at date of acquisition) and are subsequently re-valued to fair value.

Investments whose values are based on quoted market prices in active markets, and are therefore classified within Level 1, include active listed equities, exchange-traded funds and certain short-term, investments. The investment manager does not adjust the quoted price for such instruments.

Investments that trade in markets that are considered to be less active, but are valued based on quoted market prices, dealer quotations or alternative pricing sources supported by observable inputs are classified within Level 2. These include liquid corporate debt securities and non-exchange traded mutual funds. As Level 2 investments include positions that may not be traded in active markets and/or may subject to transfer restrictions, valuations may be adjusted, generally based on available market information.

None of the investments are classified within Level 3.

**Income from Donor Funds:** In accordance with the agreements described in Note 6, income from Donor Funds is recorded on an accruals basis when costs reimbursable under the grant agreements were incurred and reimbursed.

#### FINANCIAL STATEMENTS

#### FOR THE YEAR ENDED MAY 31, 2015

#### (Expressed in United States dollars)

#### 3. Significant accounting policies (continued)

**Income and expenses from parametric contracts:** Amounts payable/receivable for claims under the parametric policies written and ceded does not correlate directly to the policyholder's incurred insurable loss (see Note 2 for details). Accordingly, these policies are not accounted for as insurance contracts within these financial statements.

Income from parametric contracts is initially recognized as a liability (reinsurance expense ceded: as an asset) and subsequently reported at fair value. All subsequent changes in fair value of the parametric contracts are recognized in earnings as income (reinsurance expenses) attributable to parametric contracts. The fair value of the contracts is determined based on management's best estimate of the discounted payouts (recoveries) resulting from the reasonably probable occurrence, magnitude and location of insured/reinsured events (based on historical trends and statistics) during the unexpired period of the contracts. At May 31, 2015, there was no unexpired period on either the written or ceded parametric contracts; accordingly, the fair value of these instruments was \$Nil and accordingly, all income and expenses on such contracts are recognized as income/expense in the Statement of Operations.

**Participation fee deposits:** Participation fee deposits are paid by Participating Countries to enter the program. Deposits received are recorded as a liability in the financial statements. Participation fee deposits are recognized as income when:

- they are no longer refundable to the Participating Countries (see Note 8); and/or
- they are required to fund losses (see Note 8)

Deposits that are utilized to fund losses will be reinstated to the extent available from subsequent retained earnings up to the maximum amount of the initial deposits.

**Foreign currency translation:** Foreign currency assets and liabilities are converted to U.S. dollars at the rate of exchange prevailing at the balance sheet date. Transactions in foreign currencies are converted into U.S. dollars at the rate of exchange prevailing at the date of the transaction. Foreign exchange differences are included in the Statement of Operations in the year to which they relate.

<u>Uncertain income tax positions</u>: The authoritative US GAAP guidance on accounting for, and disclosure of, uncertainty in income tax positions requires CCRIF SPC to determine whether an income tax position is more likely than not to be sustained upon examination by the relevant tax authority, including resolution of any related appeals or litigation processes, based on the technical merits of the position. For income tax positions meeting the more likely than not threshold, the tax amount recognized in the financial statements, if any, is reduced by the largest benefit that has a greater than fifty percent likelihood of being realized upon ultimate settlement with the relevant taxing authority. The application of this authoritative guidance has had no effect on the financial statements.

**Provision for uncollectible receivables:** Management evaluates credit quality by evaluating the exposure to individual counterparties; where warranted management also considers the credit rating of financial position, operating results and or payment history of the counterparty. Management establishes provisions for amounts for which collection is considered doubtful. Adjustments for previous assessments are recognized as income in the year in which they are determined. No receivables are due in more than 12 months. At May 31, 2015, no receivables were determined to be past due or impaired and, accordingly, no provision for doubtful collection has been established.

#### FINANCIAL STATEMENTS

#### FOR THE YEAR ENDED MAY 31, 2015

#### (Expressed in United States dollars)

#### 3. Significant accounting policies (continued)

**Development costs:** Development costs are amounts capitalized with respect to the development of the second generation catastrophe loss model which became operational, effective June 1, 2010, upgrade to the second generation loss model which became operational subsequent to May 31, 2012 and the excess rainfall model which became operational in 2014. The development costs are amortized on a straight line basis over 10 years for loss models (and 3 years for model upgrades), (being management's best estimate of the expected useful life) from the date the respective models become operational.

<u>Segregated Portfolios</u>: Each segregated portfolio's assets, liabilities and transactions are kept segregated and separately identifiable and accordingly each segregated portfolio is a separately identifiable financial reporting unit which respectively maintains segregated accounting records.

Each individual Segregated Portfolio is established in connection with the issuance of separate non-voting redeemable preference shares which are attributable to an individual segregated portfolio. The preference shares of each Segregated Portfolio are held by the Trust. Accordingly, as the Company has no ownership or beneficial interests in the net assets of any Segregated Portfolio, the results of the Segregated Portfolios are not consolidated and no transactions between Segregated Portfolios and/or the Core are eliminated.

Separate financial statements are prepared for the Core and each Segregated Portfolio and presented collectively in columnar format.

**Segregated Portfolio rental fees**: The Board of Directors may, at its discretion, charge rental fees to the Segregated Portfolios. Such fees represent a discretionary allocation of central costs necessarily incurred by the Core in the operation of the Segregated Portfolios. Rental fee income and expenses is recorded by the Core and Segregated Portfolios, respectively, when declared by the Board of Directors and in the amounts so determined by the Board of Directors.

#### 4. Cash and cash equivalents

Cash and cash equivalents comprise accounts held by two banks in the Cayman Islands, along with cash and margin call accounts held with the investment managers, and are managed within guidelines established by the Board of Directors.

#### 5. Investments

During the year, London and Capital, EFG Bank and Butterfield Bank were engaged to provide asset management services under the terms of the related investment management agreements.

The following tables summarize the investments that are measured at fair value at May 31, 2015:

#### FINANCIAL STATEMENTS

#### FOR THE YEAR ENDED MAY 31, 2015

#### (Expressed in United States dollars)

#### 5. Investments (continued)

	Fair Value Measurements Determined Using:									
Core	Level 1	-	Level 2		Level 3					
	inputs		in	puts		inputs		Total		
At May 31, 2015:										
Non-exchange traded mutual funds	\$	-	\$4,	860,620	\$	-	\$	4,860,620		
Exchange-traded funds	2,571,3	335		-		-		2,571,335		
Equity investments										
- Communications	297,5	531		-		-		297,531		
- Consumer, Cyclical	400,7	/20		-		-		400,720		
- Consumer, Non-cyclical	700,6	543		-		-		700,643		
- Industrial	276,3	366		-		-		276,366		
- Technology	448,5	588		-		-		448,588		
Corporate debt securities		_	43,	163,734			_	43,163,734		
	\$ <u>4,695,1</u>	83	\$ <u>48</u> ,	<u>024,354</u>	\$		\$	52,719,537		
	Fair Valu	ıe Me	easuren	ients Det	ermi	ned Using:				

	Fair Value Measurements Deter inneu Using.										
EQ/TC SP	Level 1 inputs		Level 2 inputs		Level 3 inputs		Total				
At May 31, 2015:		mputs	mput	5		puts		Iotui			
Equity investments											
- Communications	\$	511,419	\$	-	\$	-	\$	511,419			
- Consumer, Cyclical		688,725		-		-		688,725			
- Consumer, Non-cyclical		1,204,144		-		-		1,204,144			
- Industrial		470,629		-		-		470,629			
- Technology		769,922		-		-		769,922			
Corporate debt securities	_		33,245.	<u>,555</u>				33,245,555			
	\$	3,644,839	\$ <u>33,245</u>	<u>,555</u>	\$		\$	<u>36,890,394</u>			
	F	'air Value M	easurement	s Dete	ermined	Using:					

	i un vuide medal ements Deter minea esing.							
XSR SP		Level 1		Level 2	Le	evel 3		
		inputs		inputs	in	puts		Total
At May 31, 2015:								
Equity investments								
- Communications	\$	248,353	\$	-	\$	-	\$	248,353
- Consumer, Cyclical		333,856		-		-		333,856
- Consumer, Non-cyclical		583,397		-		-		583,397
- Industrial		227,006		-		-		227,006
- Technology		373,776		-		-		373,776
Corporate debt securities				16,285,127				16,285,127
	\$ <u></u>	1,766,388	\$	16,285,127	\$		\$	<u>18,051,515</u>

#### FINANCIAL STATEMENTS

#### FOR THE YEAR ENDED MAY 31, 2015

#### (Expressed in United States dollars)

#### 5. Investments (continued)

	F	Fair Value Measurements Determined Using:					
LPC SP		Level 1		Level 2		Level 3	
		inputs		inputs		inputs	Total
At May 31, 2015:							
Equity investments							
- Communications	\$	68,377	\$	-	\$	-	\$ 68,377
- Consumer, Cyclical		90,605		-		-	90,605
- Consumer, Non-cyclical		156,327		-		-	156,327
- Industrial		59,614		-		-	59,614
- Technology		100,460		-		-	100,460
Corporate debt securities		-	_	4,221,276		-	 4,221,276
	\$	475,383	\$	4,221,276	\$		\$ 4,696,659

The cost of investments for Core, EQ/TC, XSR and LPC at May 31, 2015 is \$52,722,927, \$37,423,697, \$18,304,818 and \$4,784,578 respectively.

At May 31, 2015, the Core holds positions in one non-exchange traded open ended mutual fund, incorporated in Ireland. The objective of the fund is to seek to maximise total return consistent with preservation of capital and prudent investment management. Management considers this fund to be relatively liquid as the fund processes subscriptions and redemptions on a daily basis, subject to their respective terms and conditions. Under certain circumstances, the administrator of the fund has the ability to suspend redemptions if it is considered to be in the best interests of the shareholder company of the funds as a whole. There are no unfunded commitments to this mutual fund.

	Core	EQ/TC SP	XSR SP	LPC SP
Percentage of debt securities issued by US counterparties	27%	28%	28%	42%
Percentage of debt securities issued by UK counterparties	26%	26%	25%	19%
Percentage of debt securities issued by counterparties based other countries	47%	46%	47%	39%
	Core	EQ/TC SP	XSR SP	LPC SP
Percentage of securities graded as A- or higher	<b>Core</b> 41%	<b>EQ/TC SP</b> 28%	<b>XSR SP</b> 29%	<b>LPC SP</b> 34%
		-		

#### FINANCIAL STATEMENTS

#### FOR THE YEAR ENDED MAY 31, 2015

#### (Expressed in United States dollars)

#### 5. Investments (continued)

The average maturity as at May 31, 2015 is disclosed in the table below:

	Core	EQ/TC SP	XSR SP	LPC SP
Average maturity	6.18 years	4.90 years	4.52 years	3.32 years

The company is exposed to foreign exchange risk on debt securities that corresponds to the jurisdiction of the issuing counterparties.

Short term investments consist of cash held with the investment managers, term deposits and margin call accounts (see Note 9). The margin call accounts are restricted cash balances required to be posted with respect to the futures contracts (see Note 3 and 9).

#### 6. Donor Funds

During the year ended May 31, 2015 the Core was involved in the Munich Climate Insurance Initiative ("MCII") donor trust fund.

The MCII is funded by the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety. Under the agreement, the Core is eligible to receive funding for reimbursable costs involving the time costs and travel expenses of the Facility Supervisor project team in partnership with MicroEnsure (an independent entity specialising in the development of micro-insurance programs) to perform market research and assess demand for new micro-insurance parametric products, specifically for community business groups and regional development banks.

During the year ended May 31, 2015, \$83,544 relating to Munich Climate Initiative Project Costs was reimbursed by the Donor Funds to the Core. At May 31, 2015 the Donor Funds have been fully utilized.

#### 7. Income from parametric contracts received in advance

At May 31, 3015, income from parametric contracts received in advance represents amounts paid by two participating countries in EQ/TC and one participating country in XSR with respect to their 2015/16 policies during the year ended May 31, 2015.

#### 8. Participation fees deposits

Participating fee deposits represent non-recurring amounts required to be paid by each Participating Country to enter a CCRIF SPC program. The deposits are equivalent to a proportion of the annual premiums written in respect of each Participating Country. It is Management's intent that participation fee deposits are available to fund losses in the event that funds from retained earnings and reinsurers are insufficient. If deposits are used to fund losses, it is also Management's intent that any subsequent earnings will be used to reinstate the deposits to their original carrying value; however, for the period from inception to May 31, 2015, no deposits have been used to pay losses. The participation fees are refundable, without interest, in the event that the CCRIF SPC does not renew the coverage to participating countries. Participation fees are not refundable if a Participating Country leaves the program for more than one year in any five year period, and would be recognized as income at that point. Participating Countries, who leave the program resulting in participation fees being voided, may, at the discretion of the Directors, be required to repay participation fees if they want to rejoin the program subsequently.

#### FINANCIAL STATEMENTS

#### FOR THE YEAR ENDED MAY 31, 2015

#### (Expressed in United States dollars)

#### 8. Participation fees deposits (continued)

Further, participation fees deposits are partially refundable when a Participating Country's premium is reduced due to a reduction in coverage purchased, to the extent of the revised annual premiums.

During the year ended May 31, 2011, the Board of Directors approved a modification to the participation agreements such that up to 50% of the participation fees deposits paid by the Participating Countries could be used towards their respective premiums and during the year ended May 31, 2015, two Participating Countries elected to use a proportion of participation fee deposits held by EQ/TC SP to partially settle their premiums (refer to Statements of Cash Flow for amounts).

#### 9. Derivative instruments

Derivatives are used for hedging purposes and portfolio management. Derivative instruments transactions include futures, forwards, and options with each instrument's primary risk exposure being interest rate, credit, foreign exchange, equity or commodity risk. The fair value of these derivative instruments are included as separate line items in the balance sheet with changes in fair value reflected as net change in unrealized gains/(losses) on derivatives as a component of the investment income line item in the Statement of Operations (see Note 13).

The following tables indicate the realized and unrealized gains and losses on derivatives, by contract type, as included in investment income in the Statement of Operations for the year ended May 31, 2015 (see Note 13).

<u>Core</u>	Gross	Gross	Net	Change in
	realized	realized	realized	unrealized
	gains	loss	gains	gains/(loss)
Futures & options on fixed income securities	\$ 1,582,091	\$ (1,060,943)	\$ 521,148	\$
Foreign exchange contracts	2,638,955	(312,730)		
Total	\$ <u>4,221,046</u>	\$ <u>(1,373,673</u> )	\$ <u>2,847,373</u>	\$ <u>(380,375</u> )
EQ/TC SP	Gross	Gross	Net	Change in
	realized	realized	realized	unrealized
	gains	loss	gains	gains/(loss)
Futures & options on fixed income securities	\$ 781,294	\$ (576,222)	\$ 205,072	\$( <u>323,095</u> )
Foreign exchange contracts	912,302	(4,886)	907,416	
Total	\$ <u>1,693,596</u>	\$ <u>(581,108</u> )	\$ <u>1,112,488</u>	\$ <u>(323,095</u> )
<u>XSR SP</u>	Gross	Gross	Net	Change in
	realized	realized	realized	unrealized
	gains	loss	gains	gains/(loss)
Futures & options on fixed income securities	\$ 368,020	\$ (277,524)	\$ 90,495	\$( <u>140,118</u> )
Foreign exchange contracts	<u>438,509</u>	(2,204)	<u>436,306</u>	
Total	\$ <u>806,529</u>	\$ <u>(279,728</u> )	\$ <u>526,801</u>	\$ <u>(140,118</u> )

#### FINANCIAL STATEMENTS

#### FOR THE YEAR ENDED MAY 31, 2015

#### (Expressed in United States dollars)

#### 9. Derivative instruments (continued)

LPC SP	Gross	Gross	Net	Change in
	realized	realized	realized	unrealized
	gains	loss	gains	gains/(loss)
Futures & options on fixed income securities\$	140,941	\$ (27,946)	\$ 113,475	\$(42,923)
Foreign exchange contracts	43,663	(766)	<u>42,897</u>	
Total \$_	184,604	\$ <u>(28,232</u> )	\$ <u>156,372</u>	\$ <u>(42,923</u> )

The exposures on derivative contracts are generally short-term as these contracts are settled or lapse within a short time frame. The positions held in foreign exchange contracts at May 31, 2015, are reflective of the average positions held in forward and futures contracts during the year. With respect to futures and option contracts, the maximum notional exposure at any one point in time during the year ended May 31, 2015 were:

Core	Futures: \$9,950,953	Options: \$95,120
EQ/TC SP	Futures: \$16,434,816	Options: \$153,120
XSR SP	Futures: \$8,093,538	Options: \$71,920
EQ/TC SP	Futures: \$1,498,350	Options: \$20,880

The following outstanding foreign exchange contracts were held as at May 31, 2015:

<u>Core</u>	Maturity date	Notional value	]	Fair Values
United States Dollars forward (bought US\$ sold €)	June 15, 2015	\$3,437,500 (at future rate of US\$1.1000: €1)	\$	(131,278)
United States Dollars forward (bought US\$ sold £)	June 15, 2015	\$3,057,800 (at future rate of US\$1.5289: £1)		(73,152)
			\$ <u></u>	(204,430)
EQ/TC SP	Maturity date	Notional value	]	Fair Values
United States Dollars forward (bought US\$ sold €)	June 15, 2015	\$5,225,000 (at future rate of US\$1.1000: €1)	\$	(199,651)
United States Dollars forward (bought US\$ sold £)	June 15, 2015	\$5,160,038 (at future rate of US\$1.5289: £1)	_	(123,444)
			\$	(323,095)

#### FINANCIAL STATEMENTS

#### FOR THE YEAR ENDED MAY 31, 2015

#### (Expressed in United States dollars)

#### 9. Derivative instruments (continued)

XSR SP	Maturity date	Notional value		Fair Values
United States Dollars forward (bought US\$ sold €)	June 15, 2015	\$2,337,500 (at future rate of US\$1.1000: €1)	\$	(87,540)
United States Dollars forward (bought US\$ sold £)	June 15, 2015	\$2,197,794 (at future rate of US\$1.5289: £1)		(52,578)
			\$_	(140,118)
LPC SP	Maturity date	Notional value		Fair Values
United States Dollars forward (bought US\$ sold €)	June 15, 2015	\$687,500 (at future rate of US\$1.1000: €1)	\$	(24,635)
United States Dollars forward (bought US\$ sold £)	June 15, 2015	\$764,450 (at future rate of US\$1.5289: £1)		(18,287)

#### 10. Share capital and share premium

The authorised share capital of CCRIF SPC is \$50,000 divided into 1,000 voting ordinary shares with a nominal or par value of \$1.00 per share and 49,000 non-voting redeemable preference shares of \$1.00 each. The following amounts are issued and fully paid.

	Core	EQ/TC SP	XSR SP	LPC SP
Share capital Non-voting redeemable preference shares Share premium	\$ 1,000 	\$	\$- 1 <u>24,999,999</u>	\$ - 1 <u>4,999,999</u>
	<u>\$120,000</u>	<u>\$42,500,000</u>	<u>\$25,000,000</u>	<u>\$5,000,000</u>

The holders of the general common shares are entitled to receive notice of, attend and vote at any general meeting of CCRIF SPC. Holders of non-voting redeemable segregated portfolio shares have no right to receive notice of or attend any general meetings of CCRIF SPC, nor have any right to vote at any such meetings in respect of such shares. Holders of non-voting redeemable segregated portfolio shares have the right to dividends or other distributions, subject to a directors' resolution as to the timing and amount of such dividends, have the right to a return of capital of CCRIF SPC upon winding up of CCRIF SPC, in preference to that of the Ordinary shares, and the shares can be redeemed by CCRIF SPC.

The share premium account represents the excess of the proceeds from issued share capital over the par value of the shares issued. The share premium account was established in accordance with the Cayman Islands Companies Law, which restricts the uses of these reserves.

#### FINANCIAL STATEMENTS

#### FOR THE YEAR ENDED MAY 31, 2015

#### (Expressed in United States dollars)

#### **10.** Share capital and share premium (continued)

Pursuant to the CCRIF SPC's Articles of Association, the Directors may declare and authorize payment of dividends out of profits of CCRIF SPC. Payment of any dividends is subject to approval by the Cayman Islands Monetary Authority ("CIMA").

Under the Cayman Islands Insurance Law the Company is required to maintain a minimum and prescribed net worth of \$100,000.

CIMA has statutory powers that enable it to use its discretion to require CCRIF SPC to conduct its operations in accordance with general or specific conditions which may be imposed by CIMA or may be agreed between CIMA and CCRIF SPC. Generally, such matters are set out in the Business Plan which CCRIF SPC files with CIMA and, amongst others, includes reference to the risks assumed and retained by CCRIF SPC, the funding and capitalization levels, and investment policies.

#### **<u>11. Central American Initiative</u>**

During the year ended May 31, 2015 the directors incurred expenditure relating to the future extension of the Tropical Cyclone and Earthquake programme towards the countries of Central America (Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Panama) and the Dominican Republic, represented by the Council of Finance Ministers of those countries ( the "COSEFIN Countries").

#### 12. Claims paid

There were three events which triggered claim payments to Participating Countries in the XSR SP. Total claim payments in the year ending May 31, 2015 were \$3,393,004, of which \$893,004 was recovered from reinsurers.

#### **13. Investment Income**

Investment income comprises:

-	Core	EQ/TC SP	XSR SP	LPC SP
Interest and dividend income	\$ 2,664,145	\$ 701,971	\$ 341,637	\$ 74,837
Change in fair value of investments	(3,363,870)	(533,303)	(253,303)	(87,919)
Net realized gains / (losses) on sale of				
investments	1,111,674	(127,043)	(71,032)	(32,109)
Investment management, custody and fund				
administration fees	(646,753)	(144,061)	(71,050)	(19,046)
Foreign exchange gains / (losses)	60,470	(57,794)	(33,245)	(10,886)
Net realized gains on derivative instruments				
(Note 9)	2,847,373	1,112,488	526,801	155,892
Change in unrealized loss on derivative				
instruments (Note 9)	(380,375)	(323,095)	(140, 118)	(42,922)
	<u>\$ 2,292,664</u>	\$ 629,163	<u>\$ 299,690</u>	<u>\$ 37,847</u>

#### FINANCIAL STATEMENTS

#### FOR THE YEAR ENDED MAY 31, 2015

#### (Expressed in United States dollars)

#### 14. Administration expenses

Administration expenses comprise:

runnistration expenses comprise.	Core	EQ/TC SP	XSR SP	LPC SP
Audit and other professional fees	\$ 114,000	\$ 19,500	\$ -	\$ -
Captive management fees	120,000	-	15,000	4,500
Consultancy fees	99,532	40,000	-	-
Board and executive management remuneration	650,669	-	-	-
Directors' and Officers' insurance	25,661	-	-	-
Legal fees	26,615	75,000	55,000	-
Government fees	12,594	-	-	-
Meeting expenses	101,149	-	-	-
Publicity, conferences & workshops	142,255	-	5,000	-
Trust expenses (Note 15)	30,000	-	-	-
Munich Climate Initiative Project (Note 6)*	87,299	-	-	-
Sundry expenses and bank charges	11,958	405	301	
* Darts of these expanses were reimburged under a	<u>\$1,421,732</u>	<u>\$134,905</u>	<u>\$75,301</u>	<u>\$4,500</u>

\* Parts of these expenses were reimbursed under a grant.

#### 15. Related party transactions

During the year ended May 31, 2015, the Core incurred the Trustee fees of \$20,000 and Enforcer fees of \$10,000 on behalf of the Trust.

During the year ended May 31, 2015, key management compensation consisted of salaries and expenses amounting to \$438,434 for two employees which are included within administration expenses. Included within this amount is \$44,952 of vacation leave relating to prior periods which was previously unaccrued.

#### 16. Taxation

No income, capital or premium taxes are levied in the Cayman Islands and CCRIF SPC has been granted an exemption until May 29, 2027, for any such taxes that might be introduced. CCRIF SPC intends to conduct its affairs so as not to be liable for taxes in any other jurisdiction. Accordingly, no provision for taxation has been made in these financial statements.

#### FINANCIAL STATEMENTS

#### FOR THE YEAR ENDED MAY 31, 2015

#### (Expressed in United States dollars)

Coord

#### **<u>17. Development costs</u>**

<u>Core</u>	Second Generation <u>Loss Model</u>	Second Generation Loss Model _upgrade	Excess rainfall	<u>Total</u>
Cost:				
Balance carried forward at May 31, 2014	\$ 180,000	\$ 379,755	\$ 130,000	\$ 689,755
Additions during the year			245,000	245,000
Balance carried forward at May 31, 2015	180,000	379,755	375,000	934,755
Accumulated amortisation:				
Balance carried forward at May 31, 2014	72,000	379,755	39,000	490,755
Amortisation charge for the year	18,000	<u> </u>	37,667	55,667
Balance carried forward at May 31, 2015	90,000	379,755	76,667	546,422
Net book value at May 31, 2015	\$ <u>90,000</u>	\$ <u> </u>	\$ <u>298,333</u>	\$ <u>388,333</u>

Development costs above represent fees paid to third parties for development of computer loss modeling software which is necessary for the underwriting operations of CCRIF SPC.

#### 18. Due to / from Core and Due to / from Segregated Portfolios

During the year ended May 31, 2015, the EQ/TC SP bank account received premiums of \$2,546,538 which relate to premiums for insurance policies written by the XSR SP. This amount was outstanding at May 31, 2015.

During the year ended May 31, 2015, the following transactions occurred between the Core and the Segregated Portfolios:

	EQ/TC SP	XSR SP
Cash transferred from Core	\$ (28,241)	\$ (8,979)
Participation fee deposit transferred by Core	13,420,008	-
SP expenses paid by Core on behalf of SP	-	(34,697)
Core expenses paid by SP on behalf of Core	-	65,000
SP premium received by Core	350,000	106,250
Total due from Core	\$13,741,767	\$127,574

#### FINANCIAL STATEMENTS

#### FOR THE YEAR ENDED MAY 31, 2015

#### (Expressed in United States dollars)

#### **18.** Due to / from Core and Due to / from Segregated Portfolios (continued)

Premium received by EQ/TC SP Cash transferred from Core SP expenses paid by Core on behalf of SPs	<b>Core</b> \$	<b>XSR SP</b> \$2,546,538
Total due from Segregated Portfolio	\$13,940	\$2,546,538
Cash transferred from Core SP expenses paid by Core on behalf of SPs Total due to Core		LPC SP \$ 1,446 12,494 \$13,940
Premium received by EQ/TC SP Cash transferred from Core Participation fee deposit transferred by Core SP expenses paid by Core Core expenses paid by SP SP premium received by Core	<b>Core</b> \$ - (37,220) 13,420,008 (34,697) 65,000 456,250	EQ/TC SP \$2,546,538 - - -
Total due to Segregated Portfolio	\$13,869,341	\$2,546,538

#### 19. Certain risks and financial instruments

#### (a) Geographical concentration of risk

The CCRIF SPC's principal activity comprises parametric catastrophe risk coverage for Participating Countries in the Caribbean region.

#### (b) Fair value

With the exception of balances in respect of insurance contracts, which are specifically excluded under U.S. GAAP, the carrying amounts of all financial instruments, except for investments, approximate their fair values due to their short-term maturities, and have been determined using Level 2 inputs; aside from cash and cash equivalents which have been determined using Level 1 inputs. Investments and derivative instruments are carried at fair value as described in Notes 3, 5 and 9.

#### (c) Credit risk

Financial assets potentially subject to concentrations of credit risk consist of cash and cash equivalents, investments in debt instruments and accrued interest receivable. The maximum amount of loss at May 31, 2015 would incur if the counterparties to the transactions do not meet their obligations, which would be the carrying amount of such assets in the balance sheet. Cash and cash equivalents and investments are placed with or held in custody by high credit quality financial institutions. Similarly, the investment policy requires that the investment managers invest in securities with a high credit quality (see Note 5). The credit risk is managed by transacting only with counterparties considered highly reputable and creditworthy and within established investment/derivative guidelines.

#### FINANCIAL STATEMENTS

#### FOR THE YEAR ENDED MAY 31, 2015

#### (Expressed in United States dollars)

#### 19. Certain risks and financial instruments (continued)

#### (d) Interest rate risk

The fair value of investments in fixed interest securities will be affected by movements in interest rates. An analysis of the investment portfolios is shown in Note 5. The fair value of the futures contracts may also be affected by movements in interest rates.

#### (e) Market risk

Market risk exists to the extent that the values of monetary assets fluctuate as a result of changes in market prices. Changes in market prices can arise from factors specific to individual securities, their respective issuers, securities/markets to which they are linked, or factors affecting all securities traded in a particular market. Relevant factors are both volatility and liquidity of specific securities and of the markets in which the investments are held.

#### (f) Liquidity risk

Liquidity risk exists to the extent that investments may not be sold/ redeemed on a timely basis to settle losses. The liquidity risk is mitigated by maintaining a proportion of assets in cash and short-term investments.

#### (g) Foreign exchange risk

In the normal course of business, the assets and liabilities may be held in currencies other than U.S. dollars. To reduce its risk to foreign exchange fluctuations forward foreign exchange contracts may be entered to. Forward foreign currency contracts result in exposure to currency risks to the extent of any mismatch between foreign exchange forward contracts and the corresponding financial instruments denominated in foreign currencies. Foreign currency forward contracts commit to purchase or sell the designated foreign currency at a fixed rate of exchange on a future date. The fair value of the forward foreign exchange contracts will fluctuate as a result of changes in the corresponding market rate of exchange. See Note 9 for details of forward foreign exchange contracts entered into during the period.

#### (h) Futures contracts risk

In the normal course of business financial futures are held and traded and are carried at fair value. These futures contracts represent future commitments to purchase financial instruments on specific terms at specified future dates. The fair value of the futures contracts will fluctuate corresponding to the fair value of the underlying financial instruments (see Note 9). The notional value of the underlying financial instruments represents the maximum risk of loss. The Directors consider this risk to be mitigated because of the short terms of the futures contracts and the underlying financial instruments being investment grade. There were no open futures contracts held at May 31, 2015 (see Note 9).

#### (i) Swaps

The Group enters into swap contracts to manage interest rate risk and hedge or obtain exposure to credit risk. The Group uses CDSs to provide protection against or obtain exposure to the credit default risks of sovereign or corporate issuers.

CDSs involve greater risks than if the Group had invested in the reference obligation directly. In addition to general market risks, CDSs are subject to liquidity risk and counterparty credit risk. The Group enters into CDSs with counterparties meeting certain criteria for financial strength. Where the Group is buying protection, the Group will recover none of the payments made to purchase that protection should a credit event not occur. During the year ended May 31, 2015 the Group did not sell credit protection.

In connection with equity swap contracts, cash or securities may be posted to or received from the swap counterparty in accordance with the terms of the swap contract. The Group earns or pays interest on cash posted or received as collateral.

#### FINANCIAL STATEMENTS

#### FOR THE YEAR ENDED MAY 31, 2015

#### (Expressed in United States dollars)

#### 19. Certain risks and financial instruments (continued)

#### (i) Swaps (continued)

Off-balance sheet risks associated with all swap contracts involve the possibility that there may not be a liquid market for these agreements, that the counterparty to the contract may default on its obligation to perform and that there may be adverse changes in currency rates, credit status, market prices and interest rates. Notional contract amounts are presented in Note 10 to indicate the extent of the Group's exposure to such instruments. At May 31, 2015, the Group had no open swap contracts (see Note 10).

#### (j) Options

Transactions in options carry a high degree of risk. The following section describes the primary types of option contracts that may be held and traded and the corresponding risks.

Purchased call options represent right to purchase a stock at a set price (the "exercise price") on a future specified date (in return for a premium i.e. the price paid for the option) but create no obligation to buy the stock but rather the right to do so until the expiration date.

If the stock price at expiration is above the exercise price by more than the premium paid, the transaction will result in a gain. If the stock price at expiration is lower than the exercise price, the call option will expire worthless and the loss recorded will be the amount of the premium paid (plus any transaction costs). Compared to owning the respective stock, purchased call options leverage upside gains when a stock price increases because for the same amount of money, there is exposure to a much larger number of the securities, however, unlike owning the stock (when the entire cost of the investment is at risk), the maximum loss that can be incurred with a purchased call option is the premium paid plus transaction costs.

Purchased put options represent the right to sell a stock at a fixed exercise price on a future specified date but create no obligation to sell the stock but rather the right to do so until the expiration date. If the stock price at expiration is below the exercise price by more than the premium paid, the transaction will result in a gain. If the stock price at expiration is above the exercise price, the purchased put option will expire worthless and the loss recorded will be the amount of the premium paid (plus any transaction costs). Compared to selling short the respective stock, purchased put options leverage upside gains when a stock price decreases because for the same amount of capital invested and pledged as security, there is exposure to a much larger number of the securities, however, unlike selling a stock short (when there downside risk is unlimited for the duration the security is sold short), the maximum loss that can be incurred with a purchased put option is the premium paid plus transaction costs.

Written put options represent an obligation to buy the stock at a fixed exercise price at the buyer's option. Selling (writing) options represents a significantly higher degree of risk. If the stock price at expiration is above the exercise price, the Written put option will result in a gain equal to the amount of the premium received (less any transaction costs). If the stock price at expiration is below the exercise price by more than the amount of the premium, the written put options will result in a loss, with the potential loss being up to the full value of the exercise price of the stock for the entire contract quantity. Compared to owning the respective stock, written put options limit upside gains to the premium received less transaction costs but leverage downside losses gains when a stock price decreases because for the same amount of capital invested and pledged as security which increases the risk of significantly larger losses.

#### FINANCIAL STATEMENTS

#### FOR THE YEAR ENDED MAY 31, 2015

#### (Expressed in United States dollars)

#### 19. Certain risks and financial instruments (continued)

#### (j) Options (continued)

Written call options represent the obligation to sell the stock at a fixed exercise price at the buyer's option and represent the highest possible degree of risk. If the stock price decreases, the written call options will result in a gain equal to the amount of the premium received (less any transaction costs). If the stock price increases over the exercise price, for the entire contract quantity, by more than the amount of the premium received, the written call options will result in a loss. Since a share price has no limits to how far it can rise, where a written call option is not covered (i.e. the corresponding quantity of the underlying security is not owned. The written call option is exposed to unlimited risk of loss. Compared to selling short the respective stock, written call options create exposure to leveraged downside losses when a stock price increases because for the same amount of capital invested and pledged as security which increases the risk of significantly larger losses. There were no open option contracts at May 31, 2015 (see Note 9).

#### (k) Custody risk

There are risks involved in dealing with a custodian who settles trades. Under certain circumstances, the securities and other assets deposited with the custodian may be exposed to a credit risk with regard to such parties. In addition, there may be practical or time problems associated with enforcing the rights to assets in the case of an insolvency of any such party.

#### 20. Subsequent events

Management has performed a subsequent events review from June 1, 2015 to November 18, 2015, being the date that the financial statements were available to be issued. Management concluded that the following subsequent event requires additional disclosure in these financial statements.

Subsequent to the year end the Group established an additional Segregated Portfolio called Central America SP ("CA SP"). This Segregated Portfolio will provide earthquake and tropical cyclone coverage for Central American governments. CA SP retains all losses up to \$1.5 million. 100% of the next \$16 million of losses are reinsured with 10 reinsurers with an A.M. Best rating of at least A. Losses are determined in accordance with the formulae set out in the contracts and are to be recorded as an expense on occurrence of a covered event. A Grant Agreement between the International Bank for Reconstruction and Development / International Development Association acting as administrator of the Central America and Caribbean Catastrophe Risk Insurance Program Multi-Donor Trust Fund, and CCRIF SPC for the Central America and Caribbean Catastrophe Risk Insurance Project became effective on October 14, 2015.

# **SUPPLEMENTAL INFORMATION**

# CCRIF SPC

# **CONSOLIDATED BALANCE SHEET**

# MAY 31, 2014

# (Expressed in United States dollars)

	May 31, 2014
ASSETS	
Cash and cash equivalents	\$ 5,711,626
Investments, at fair value (Note 5)	124,215,339
Unrealized gains on forward contracts	175,945
Due from investment broker	568,691
Development costs	199,000
Accrued interest	1,045,346
Prepaid expenses	215,047
Amounts due from Donor Funds	66,948
Total Assets	\$132,197,942
LIABILTHES AND SHAREHOLDER'S EQUITY	
Liabilities	
Accounts payable and accrued expenses	567,648
Income from parametric contracts received in advance	2,475,000
Participation fee deposits	13,830,008
Total liabilities	16,872,656
Shareholder's equity	
Share capital	1,000
Non-voting redeemable preference shares	3
Share premium	119,000
Retained earnings	115,205,283
Total shareholder's equity	115,325,286
Total liabilities and shareholder's equity	\$132,197,942

# **SUPPLEMENTAL INFORMATION**

# CCRIF SPC

# CONSOLIDATED STATEMENT OF INCOME

# FOR THE YEAR ENDED MAY 31, 2014

# (Expressed in United States dollars)

	Year ended <u>May 31, 2014</u>
	<u>1414 y 51, 2014</u>
Operating income	
Income from parametric insurance contracts (Note 2)	\$ 19,526,232
Discounts awarded on parametric insurance contracts (Note 2 & 11)	(5,068,170)
Expenses on parametric reinsurance contracts (Note 2)	( <u>9,307,450</u> )
Net income on parametric contracts	5,150,612
Ceding commissions on parametric reinsurance contracts	367,750
Total operating income	5,518,362
<b>Operating expenses</b> Claims paid on parametric insurance contracts (Note 13) Brokerage and facility supervisor fees	714,212
Total operating expenses	714,212
Net operating income	4,804,150
Other income and expenses	
Investment income (Note 14)	3,083,093
Income from Donor Funds (Note 6)	191,115
Amortisation of development costs (Note 18)	(171,585)
Technical assistance expenses	(509,977)
Contribution to Relief Efforts	-
Central American Initiative (Note 12)	(118,107)
Administrative expenses (Notes 15 and 16)	(1,309,808)
Net income for the year	\$ <u>5,968,881</u>

# **SUPPLEMENTAL INFORMATION**

# CCRIF SPC

#### CONSOLIDATED STATEMENT OF CASH FLOWS

# FOR THE YEAR ENDED MAY 31, 2014

### (Expressed in United States dollars)

	Year ended <u>May 31.</u> <u>2014</u>
Operating activities	
Net income for the year	\$ 5,968,881
Adjustments to reconcile net income to net cash from operating activities: Adjustment for items not affecting cash:	
Participation fee deposits used towards income from parametric contracts*	( 719,708)
Change in net fair value of investments	( 532,602)
Net realized gains on investments	( 1,715,769)
Change in unrealized loss on derivative instruments	273,520
Amortisation of development cost	171,585
Trading Securities: Purchase of securities	(111,825,797)
Proceeds from sale of securities	110,351,560
Net movement in short term investments	( 563,663)
Due from/to broker	347,077
Changes in assets and liabilities:	517,077
Accrued interest	135,662
Amounts due from Donor Funds	1,854
Accounts payable	4,244
Income from parametric contracts received in advance	1,875,000
Prepaid expenses	3,816
Net cash provided by / (used in) operating activities	3,775,660
Investing activities	
Development costs	( <u>70,000</u> )
Net cash used in investing activities	( <u>70,000</u> )
Net change in cash and cash equivalents	3,705,660
Cash and cash equivalents at the beginning of year	2,005,966
Cash and cash equivalents at the end of year	\$ <u>5,711,626</u>
Interest and dividends received	\$ <u>3,896,820</u>

\*Non-cash decrease in participation fee deposits offset against income recoverable from parametric contracts.

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