

**CCRIF SPC**  
The Caribbean Catastrophe Risk Insurance Facility

**Annual  
Report  
2015-2016**



## **Cover Photos**

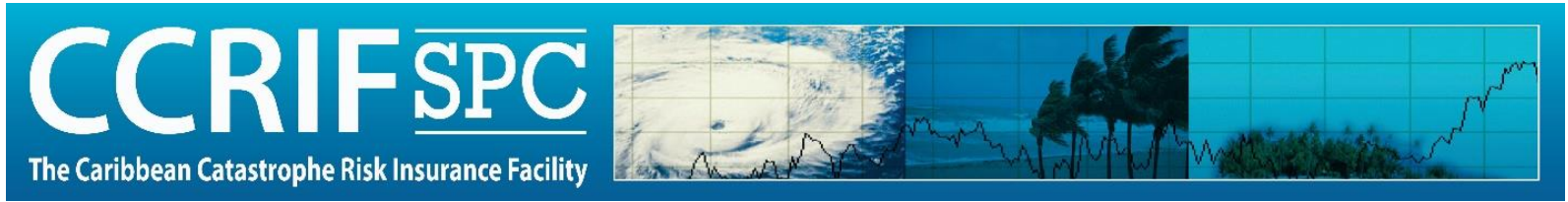
### *Left to Right*

Tropical Storm Erika, which affected CCRIF member Dominica in August 2015

Damage in Dominica due to excess rainfall during Tropical Storm Erika

A community member participating in a tree-planting exercise by the Groupe Encadré du Nord-Ouest (GAENO) in Haiti as part of a reforestation project around the pond Fond Zombi, funded through the CCRIF Small Grants Programme

CCRIF CEO, Mr. Isaac Anthony at COP 21, the 21<sup>st</sup> Conference of Parties at the United Nations Framework Convention on Climate Change (UNFCCC) held in Paris, France in November – December 2015

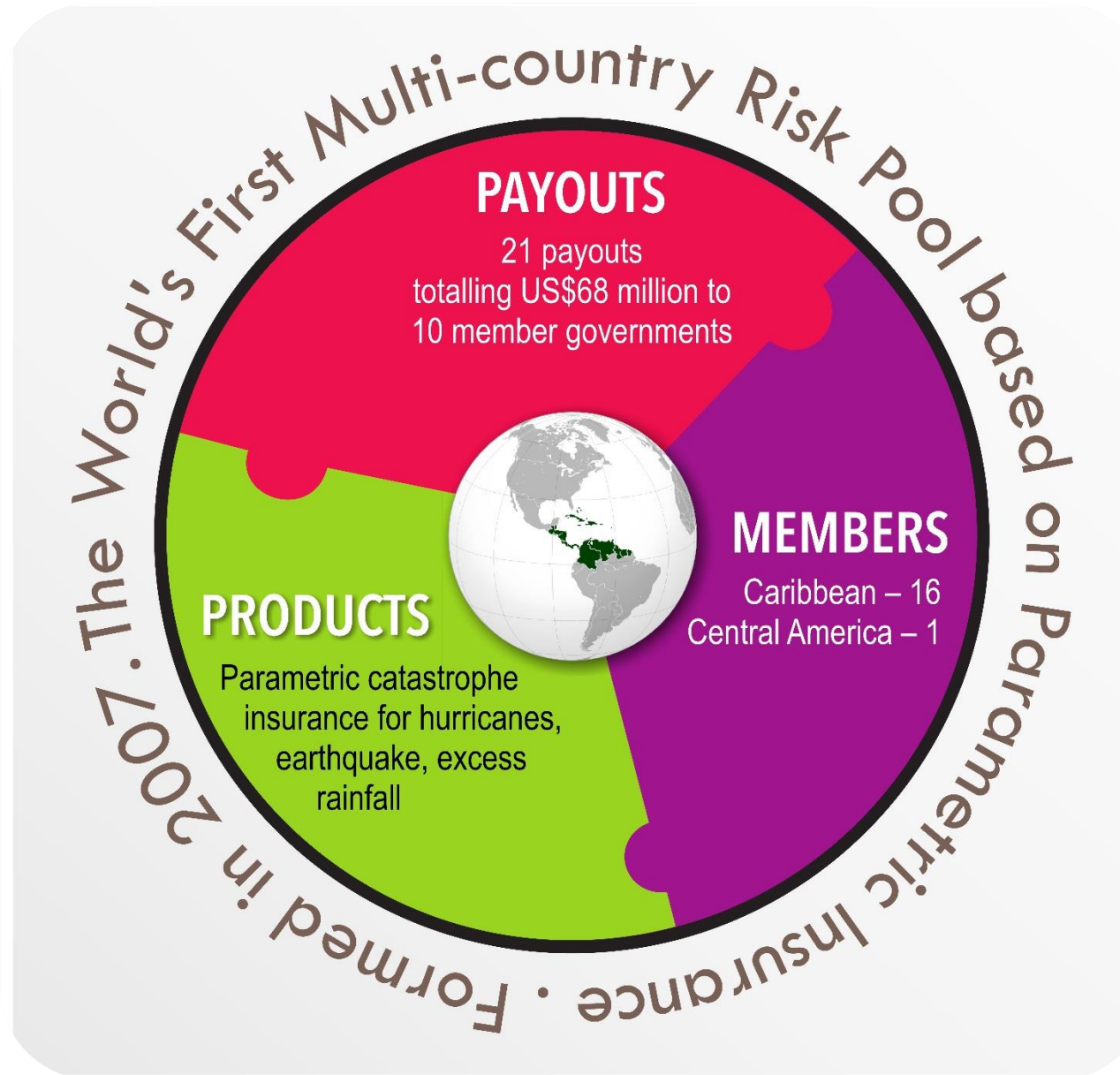


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# ANNUAL REPORT 2015-2016

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## LIST OF ACRONYMS

ARC	African Risk Capacity	MSME	Micro, Small and Medium-sized Enterprise
BAM	Banana Accompanying Measures	MOU	Memorandum of Understanding
BMU	German Federal Ministry of the Environment and Nuclear Safety	MPRES	Multi-Peril Risk Estimation System
CARICOM	Caribbean Community	NAS	National Academy of Sciences (USA)
CCCC	Caribbean Community Climate Change Centre	NDC	National Disaster Committee
CDB	Caribbean Development Bank	NGO	Non-Governmental Organization
CDEMA	Caribbean Disaster Emergency Management Agency	OECD	Organisation for Economic Co-operation and Development
CDM	Comprehensive Disaster Management	OECS	Organisation of Eastern Caribbean States
CEO	Chief Executive Officer	PCRAFI	Pacific Catastrophic Risk Assessment and Financing Initiative
CIMH	Caribbean Institute for Meteorology and Hydrology	PDNA	Post-Disaster Needs Assessment
COAST	Caribbean Oceans and Aquaculture Sustainability Facility	PPP	Public-Private Partnership
COO	Chief Operations Officer	PR	Public Relations
COSEFIN	Council of Ministers of Finance of Central America, Panama and Dominican Republic	SIDS	Small Island Developing State(s)
CROP	Caribbean Regional Oceanscape Program	SPC	Segregated Portfolio Company
DaLA	Damage and Loss Assessment	SRC	Seismic Research Centre (University of the West Indies, St. Augustine, Trinidad)
DRM	Disaster Risk Management	TA	Technical Assistance
ECA	Economics of Climate Adaptation	UK	United Kingdom
FAO	United Nations Food and Agriculture Organization	UN	United Nations
FEDSSC	Finance and Economic Development Sector Sub-Committee	UNECLAC	United Nations Economic Commission for Latin America and the Caribbean
FY	Fiscal Year	UN-OHRLSS	United Nations Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States
IKI	International Climate Initiative (Germany)	UNSG	United Nations Secretary-General
IStructE CRG	Institution of Structural Engineers Caribbean Regional Group	US	United States
IT	Information Technology	USA	United States of America
KAC	Kinetic Analysis Corporation	UWI	University of the West Indies
LDC	Least Developing Country	WFO	Weather Forecast Office
LLDC	Landlocked Developing Country	WHO	World Health Organization
LPC	Loan Portfolio Cover	XSR	Excess Rainfall
LPP	Livelihood Protection Policy		
MCI	Munich Climate Insurance Initiative		
MDTF	Multi-Donor Trust Fund		

## ABOUT CCRIF

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 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 organization, supported by a network of service providers covering the areas of risk management, risk modelling, captive management, reinsurance, reinsurance brokerage, asset management, corporate communications, technical assistance and information technology.

In 2015, CCRIF expanded to Central America, when CCRIF and COSEFIN (the Council of Ministers of Finance of Central America, Panama & 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 21 payouts for hurricanes, earthquakes and excess rainfall totalling US\$68 million to 10 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 capitalized through contributions to a Multi-Donor Trust Fund (MDTF) 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 Central America SP is capitalized by contributions to a special MDTF by the World Bank, European Commission and the governments of Canada and the United States.

### CCRIF MEMBERS

**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

# PAYOUTS TO DATE

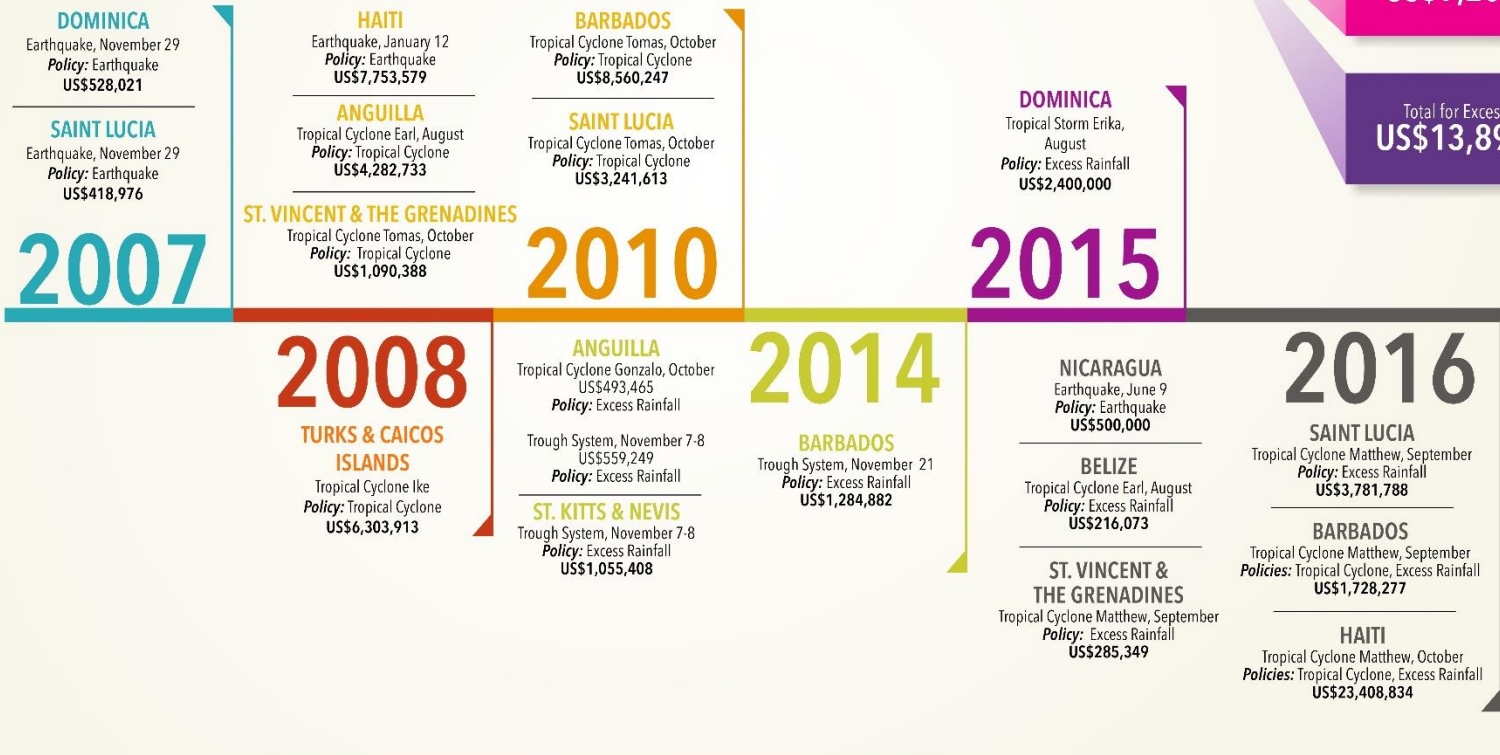
- A total of 21 payouts made to 10 member governments
- Total payouts 2007 - 2016: US\$68 million
- All payments made within 14 days

Total for the period 2007 - 2016  
US\$67,937,795

Total for Tropical Cyclone  
US\$44,841,961

Total for Earthquake  
US\$9,200,576

Total for Excess Rainfall  
US\$13,895,258





## CCRIF STRATEGIC FRAMEWORK

### OUR VISION

A Caribbean region and beyond with optimised disaster risk management and climate change adaptation practices supporting long-term sustainable development



### OUR MISSION

- Our Mission is to assist member governments and their communities in understanding and reducing the socio-economic and environmental impacts of natural catastrophes.
- We do this by being a global exemplar in providing immediate liquidity through a range of affordable insurance products, developing innovative and dynamic tools and services, engaging in effective partnerships and operating in a way that is financially sustainable and responsive to the needs of the members



### CCRIF Value Proposition CCRIF promises its clients to:

- Fill a gap in available insurance offerings for natural catastrophes
- Ensure speedy payout when a policy is triggered
- Charge lowest possible premiums consistent with long-term sustainability
- Facilitate capacity building in disaster risk management
- Be transparent and accountable

# CCRIF STRATEGIC OBJECTIVES

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 six strategic objectives.





I am pleased to present this CCRIF Annual Report for 2015-2016. This is our 9<sup>th</sup> year in operation and the first year of implementation of our 2015-2018 Strategic Plan. This Strategic Plan, whilst focussing on the future of CCRIF, takes into account lessons learned over the first eight years of operation, the progress we have made over the years and the issues and challenges being faced by our members.

As an organization that is built around the notion of continuous improvement, CCRIF uses performance measures at all levels to monitor progress towards the achievement of targets as set out in our strategic plan, as well as programme and activity success. By so doing, we are able to continuously align our priorities and link our products, programmes, key activities and operations to performance measures and to our goals, strategic objectives and customer values. Over the policy year, we met or exceeded most of our targets. Chief among these was the renewal by all members of their existing hurricane, earthquake and excess rainfall policies, signalling members' commitment to adopting a range of strategies – of which risk insurance is one – to support disaster risk management in their countries.

Two other areas that we are extremely proud of are our claims-paying capacity and the strong governance framework that we have

## CHAIRMAN'S REMARKS

built. This policy year we made a payment of US\$2.4 million to the Government of Dominica under the facility's Excess Rainfall Programme as a result of rains that occurred during Tropical Storm Erika on August 27, 2015. Dominica received this payout within 14 days of the event. It was the second payment made to the Government of Dominica, the first being on its earthquake policy in 2007 – the first year of CCRIF's operations.

It is CCRIF's rapid payment that our member countries indicate is a major benefit of CCRIF membership as it allows them to keep the wheels of government turning, engage in early recovery and clean-up activities as well as support essential services. Up to the end of this policy year, payouts totalled approximately US\$38 million to eight member governments.

We are proud of the fact that we continue to be able to provide insurance that is affordable to our members through a number of complementary mechanisms – for example, through a segregated-cell approach, whereby Caribbean and Central American states are grouped into legally separated pools of risk (two 'segregated cells') which allows for separation of risk management operations (e.g. pricing, policy format) for the different regions of CCRIF member countries but allows for bundled access to the reinsurance market.

In terms of governance, the Board reflected on its overall governance framework and, as in previous years, ensured that transparency and accountability are integrated at all levels of our decision-making and business-planning processes.

I would also like to use this report to thank our donors for their continued support and we cannot over-emphasize the important role that the international development partner community plays in

advancing the development of new and innovative products and services that we continually make available to our members. During this policy year we received contributions from donors totalling approximately US\$38 million from the Governments of the USA and Canada and the European Union to support the work that we do generally, but primarily to provide the opportunity for Central American countries to formally join CCRIF SPC.

CCRIF continues to be recognized as international best practice in risk transfer with such mechanisms becoming increasingly important and a key and indispensable component of economic policy and disaster risk management strategies as countries seek to grow their economies, reduce poverty and become internationally competitive. Internationally, Caribbean governments continue to be recognized for leading the way in pre-disaster planning.

This recognition was further concretized when in June 2015, the G-7 announced action to support efforts by vulnerable developing countries to manage climate change-related disaster risk through insurance and that this commitment will build upon existing risk insurance facilities such as CCRIF. The G-7's goal is to increase the number of people with access to direct or indirect climate risk insurance coverage by up to 400 million by 2020.

Also, in November last year during COP 21, United States President Barack Obama announced that the US Government was pledging funding worth US\$30 million to support the expansion of CCRIF as well as the Pacific Catastrophic Risk Assessment and Financing

Initiative and African Risk Capacity – to help vulnerable populations rebuild stronger after climate-related disasters.

Interest in the facility and the work we do continued to increase and as such we were invited to many conferences both regionally and internationally to increase understanding of risk transfer instruments as well the work CCRIF does. Throughout the year, many countries expressed interest in joining CCRIF and we were busy meeting with them and providing information related to the benefits of joining the facility and how it works. Studies have shown that joining CCRIF is the most cost-effective option for delivering low-cost high-quality catastrophe risk insurance, with the purpose of financing emergency costs.

As we look forward to the next few years, we are strategically positioning the facility to provide our services globally and our vision and mission was revised to facilitate this expansion. Effectively, we are working towards creating “A resilient Caribbean region and beyond with optimised disaster risk management and climate change adaptation practices supporting long-term sustainable development”. In other words, we are positioning the facility to be the world's global risk insurance facility for hazards faced by small island and coastal states – to become G-CRIF.

We look forward to another successful year and expect that 2016-17 will be a productive and rewarding year for CCRIF, our current members and those countries that become new members.



Milo Pearson, Chairman



## CEO'S REPORT



The CEO's Report will highlight the main areas of work undertaken by CCRIF over the 2015/2016 policy year. This annual report presents progress during the year towards the achievement of each of CCRIF's six strategic objectives. This policy year also represented the implementation of the first year of our new strategic Plan 2015-2018. Our performance over the fiscal year reflects our commitment to providing catastrophe insurance as one means of advancing the overall goals of Caribbean and Central American nations for sustainable

economic growth, environmental, social and fiscal sustainability and poverty reduction.

In 2015-2016 we undertook a wide range of projects aimed at fulfilling our mission and responding to the needs of members. I am very pleased to announce that this year CCRIF members – including our newest member Nicaragua – purchased a total of 43 policies – seven more than the previous fiscal year. An additional four members purchased excess rainfall policy this year, bringing the total number of policies purchased under this product to 12. This signals to us that countries are mindful of the importance of including ex-ante risk financing strategies as part of their overall disaster risk management policy framework and the linkages of these with their fiscal and debt sustainability strategies.

We continue to recognize many of the macroeconomic challenges that our members face and we are always looking for avenues to reduce premiums and offer preferable options for our members. For the 2015/16 policy year, CCRIF offered an extremely attractive premium package, which included significant discounts for hurricane, earthquake and excess rainfall policies. This rebate was a way of providing a benefit to member countries based on CCRIF's positive financial performance.

Whilst CCRIF is always guided by the need to support its members, the financial strength of the organization remains a high priority. To this end, we are pleased to indicate that CCRIF maintains a strong financial position with all segregated portfolios (SPs) – other than the XSR SP – reporting net profits for the year.

A noticeable addition to this year's financial reporting is the disclosures of the Central America SP. Owing to the legal structure, all undertakings in respect of Central America are reported in a separate segregated portfolio, which shows a modest Net Income/Retained Earnings of US\$68,000. We remain optimistic that with the continued support of key stakeholders, including the World Bank, the expansion efforts will bear much fruit in the coming year.

CCRIF made one payout this year of US\$2.4 million to the Government of Dominica as a result of rains that occurred during the passage of Tropical Storm Erika. Dominica purchased an excess rainfall policy for the first time this policy year. I will use this report to again express our condolences to the people of Dominica for the loss of life and disruption of livelihoods. As part of efforts to work with the Government to resume normalcy in operations, CCRIF also provided a grant of US\$100,000 to support the rehabilitation of the country's international airport.

Arguably, the strongest rationale for pre-disaster financing is that developing countries have a higher propensity for post-disaster resource deficits. Governments of developing countries typically must divert from their budgets to finance post-disaster expenses, and rely on new loans and donations from the international community. Historically, these sources of post-disaster finance too frequently prove inadequate to fund a timely humanitarian response. As such, CCRIF continues to respond to the needs of its members to develop new and innovative parametric insurance products.

Recent stakeholder assessments of CCRIF indicated that member governments have the desire for CCRIF to develop insurance products for the agriculture sector – addressing not only excess rainfall and wind damage but also drought conditions. I would like to report that this year, we began the development a drought product for both Central American and Caribbean countries. We have also begun discussions on the development of a product for the agriculture sector. Earlier this year as well, CCRIF engaged in an initiative of the United States Department of State, World Bank, United Nations Food and Agriculture Organization (FAO) and others to develop parametric insurance products to be marketed in the Caribbean to promote the resilience of the fisheries sector against increasing climate change-related disaster risks.

We also re-engaged in discussions with the Munich Climate Insurance Initiative (MCII) and other partners to expand the access to microinsurance products by Caribbean people who are severely impacted by extreme weather events. We expect that in the latter part of 2016 we would be able to launch Phase II of this project that is expected to result in the availability of microinsurance products to five Caribbean countries, up from three countries in Phase I. These microinsurance products, in addition to our sovereign products, will enable the facility to contribute to the G-7 mandate which aims to increase the number of people with access to direct or indirect

climate risk insurance coverage by up to 400 million by 2020 and relying on facilities such as CCRIF to assist.

As an organization that is focussed on continuous improvement, we review and assess existing products from time to time as a means of strengthening these products to the benefit of members. This year we made significant improvements to the rainfall model that underpins the XSR product. The new model – the CCRIF SPC XSR Rainfall Model 2.0 – is aimed at simulating in real time the precipitation over a country and rapidly estimating the potential consequential losses. We also prepared new Excess Rainfall Country Risk Profiles based on XSR 2.0 for all CCRIF member countries.

Throughout the year, interest in CCRIF and our products and services received even greater attention. We participated in and delivered presentations at over 20 regional and international conferences. Many of these conferences focussed on how parametric products work, the experience of CCRIF and how other regions of the world could join the facility.

Another policy development was the implementation of a “minimum payout protocol” where the minimum payout a country receives after an event that triggers a policy is equal to the annual premium it pays.

In an attempt to increase understanding of CCRIF amongst the general public, we aggressively increased our use of social media platforms such as Facebook to disseminate information on the facility. Our expansion into Central America also required us to translate many of our publications into Spanish as well as to allow our website to accommodate multiple languages. We are happy to report that this has been done.

For members we continued to enhance capacity through the delivery of short capacity building exercises that were bundled with the annual policy renewal “road show”. For each member country we met with we engaged in a capacity building session aimed at strengthening understanding of our products, the linkages between ex-ante financing instruments and economic sustainability among other topics. This is an exercise that we implemented in the last fiscal year as well.

We also spent some time assisting COSEFIN countries to better understand both parametric insurance in general and CCRIF insurance products and how they work. To this end, a team comprising CCRIF and the World Bank met with technical officials of Ministries of Finance and other related government agencies and held discussions and capacity building sessions with five COSEFIN members.

This year, I am proud to announce that we were able to expand our Technical Assistance (TA) Programme to include an Internship Programme and a Small Grants Programme. CCRIF’s Technical Assistance Programme, which was launched in 2010, was designed to support programmes and projects that are presently not funded or not fully funded by traditional donor agencies. As CCRIF operates as a not-for-profit organization, the resources made available for the TA Programme are derived from a maximum of 50 per cent of earned investment income as reported in the facility’s audited financial statements of the previous policy year. In the first year of implementation of the Internship Programme, CCRIF invested over US\$70,000 in the programme and placed 20 interns with 10 national or regional organizations. Under the Small Grants Programme, we approved four projects in the first year – two in Haiti, one in Jamaica and another at the University of the West Indies, St. Augustine campus. Both of these new programmes along with our scholarship programmes continue to demonstrate our commitment to assisting

member governments and their communities and citizens in understanding and reducing the socioeconomic and environmental impacts of natural hazards, whilst at the same time contributing to the long-term sustainability of the Region.

As we look ahead to the 2016/17 policy year and beyond, we will commit to continuous innovation as well as the development of other sustainable products, services and tools to meet the needs of members in an effort to enhance their disaster risk response and management capabilities. We also will place particular emphasis on the importance of expanding coverage among members as well as working with members to define adequate coverage levels. We remain committed to encouraging new membership from countries in both the Caribbean and Central America. Finally, we will continue to approach the donor community to access higher levels of funding that will go towards supporting our current members as well as prospective new members.

I am pleased with the progress made by CCRIF this year and look forward to working with our members, stakeholders, service providers and donors in the coming year.



Isaac Anthony, Chief Executive Officer

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## BOARD OF DIRECTORS



**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 40-year career in Caribbean insurance. Currently, he is 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**  
CDB-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**  
CDB-NOMINATED BOARD  
MEMBER, REPRESENTING  
DONORS

Faye Hardy has over 20 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 (CDB). 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). 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

Timothy Antoine is the recently appointed Governor of the Eastern Caribbean Central Bank. Previously, he was the Permanent Secretary in Grenada's Finance Ministry for 14 years. 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.



## EXECUTIVE MANAGEMENT



**ISAAC ANTHONY**  
**CHIEF EXECUTIVE OFFICER**

Isaac Anthony was appointed CCRIF Chief Executive Officer on 1 January 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. She also holds a Financial Risk Manager (FRM) designation from the Global Association of Risk Professionals.

## THE 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.



**EVALUACIÓN 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 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. 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**

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.



**WILLIS RE**  
**REINSURANCE BROKER**

Willis Re, part of Willis Towers Watson, is one of the world's leading reinsurance advisory and broking businesses, with roots dating to 1828. Through its global network, Willis Re delivers world-class reinsurance expertise and analytics capabilities to a diverse client base, serving the risk management and risk transfer needs of all the world's major re/insurance carriers and many national catastrophe schemes. With its global expertise, local understanding and on-the-ground presence, Willis Re helps clients make better reinsurance decisions and negotiate optimum terms to boost business performance. Willis Re also works in partnership with the Willis Research Network (WRN), the world's largest collaboration between academia and the finance and re/insurance industries. With over 50 world-leading institutions in the network, the WRN is unique to Willis. It provides an essential foundation for catastrophe model and vendor model analysis. Anthony Phillips, Cameron Roe and David Simmons are Willis Re's team leaders 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.

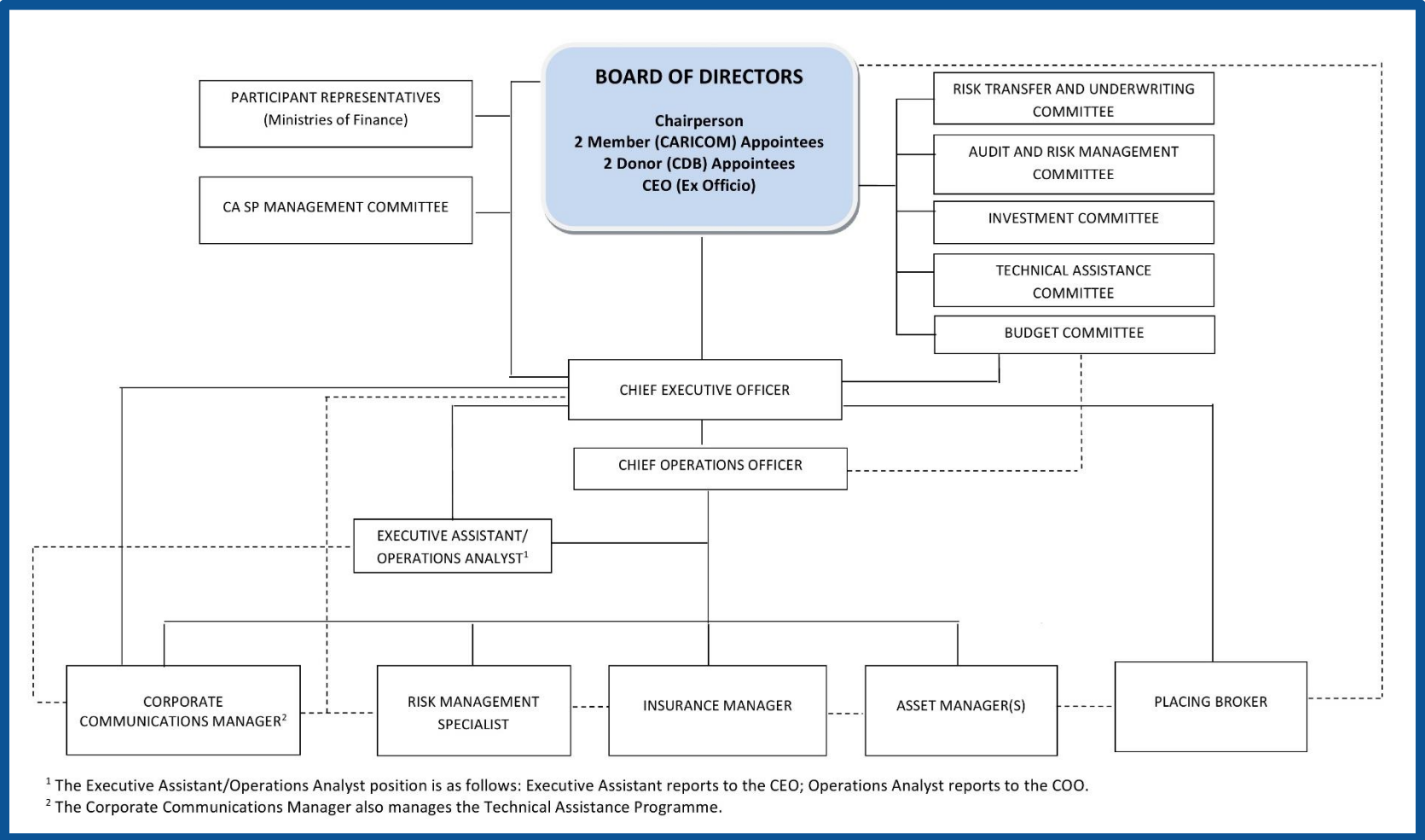


**SUSTAINABILITY MANAGERS**  
**CORPORATE COMMUNICATIONS MANAGER**

Sustainability Managers (SM) is a consultancy company that offers a range of services to public and private sector entities as well as international and regional organizations in the areas of policy development and planning, environmental education, capacity building, environmental management and communications. As Corporate Communications Manager, Sustainability Managers provides CCRIF with the following services: publications development, events planning, public relations and media relations management, strategic planning, training and IT management. SM also manages the implementation of the CCRIF Technical Assistance Programme. Elizabeth Emanuel is Sustainability Managers' team leader for CCRIF 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).

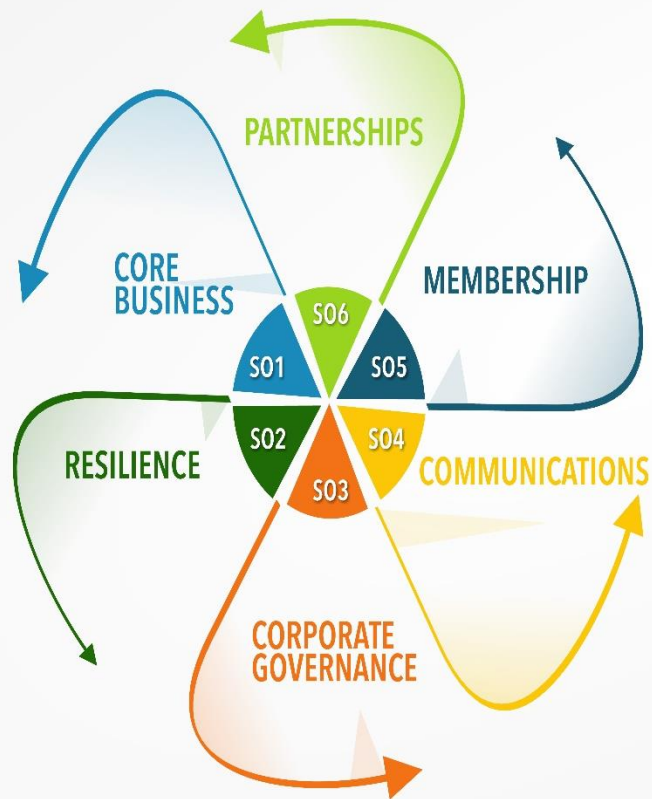




*YEAR in REVIEW*



# ACHIEVING OUR STRATEGIC OBJECTIVES 2015-2016



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

- Issued 43 tropical cyclone (TC), earthquake (EQ), excess rainfall (XSR) policies to 17 Caribbean and Central American member countries
- Made 1 payout of US\$2.4 million to Dominica on XSR policy
- Offered Livelihood Protection Policy
- Work implemented with partner organizations re agriculture and drought products

## S02 RESILIENCE To enhance capacity for disaster risk management and climate change adaptation

- Placed 20 interns in 10 national/regional organizations through CCRIF Regional Internship Programme
- Awarded 4 grants under CCRIF Small Grants Programme
- Awarded 2 post-graduate scholarships for study in the UK and USA
- Awarded 7 post-graduate and undergraduate scholarships for study at UWI
- Awarded grant to Government of Dominica for post-Erika recovery project

## S03 CORPORATE GOVERNANCE To sustain corporate and financial integrity

- Met sustainability guidelines of being able to survive a 1-in-1,000 year event
- Increased donor capitalization of CCRIF

## S04 COMMUNICATIONS To deepen understanding and knowledge of catastrophe risk and the solutions CCRIF provides

- Conducted training and policy renewals discussions with member governments
- Produced CCRIF video series
- Produced over 30 publications and briefings
- Participated in over 25 conferences and stakeholder meetings

## S05 MEMBERSHIP To expand membership

- Engaged in policy discussions with Central American countries
- Continued engagement with other Caribbean countries

## S06 PARTNERSHIPS To deepen strategic partnerships

- Signed letter of intent with CDB to develop Country Risk Management initiative
- With OECS, developed action plans for vulnerable communities in Saint Lucia and finalized workplan to build capacity to implement community projects
- Signed new MOU and finalized work plan with UNECLAC to develop guidelines for estimating environmental losses associated with disasters and update DaLA training materials
- Supported 9th Caribbean Conference on Comprehensive Disaster Management, hosted by CDEMA
- With CDEMA, supported Regional Technical Working Group in efforts to develop country risk profiles for national planning and development

## CCRIF'S INSURANCE PRODUCTS

### TROPICAL CYCLONE, EARTHQUAKE AND EXCESS RAINFALL POLICIES

For the 2015/2016 policy year, CCRIF members – including new member Nicaragua – purchased a total of 43 policies: 17 tropical cyclone (TC) policies, 14 earthquake (EQ) policies and 12 excess rainfall (XSR) policies as shown by the shaded areas in the table below.



CCRIF Member Country	Policies Purchased for 2015/16		
	TC	EQ	XSR
Anguilla			
Antigua & Barbuda			
Bahamas			
Barbados			
Belize			
Bermuda			
Cayman Islands			
Dominica			
Grenada			
Haiti			
Jamaica			
Saint Lucia			
St. Kitts & Nevis			
St. Vincent & the Grenadines			
Turks & Caicos Islands			
Trinidad & Tobago			
Nicaragua			

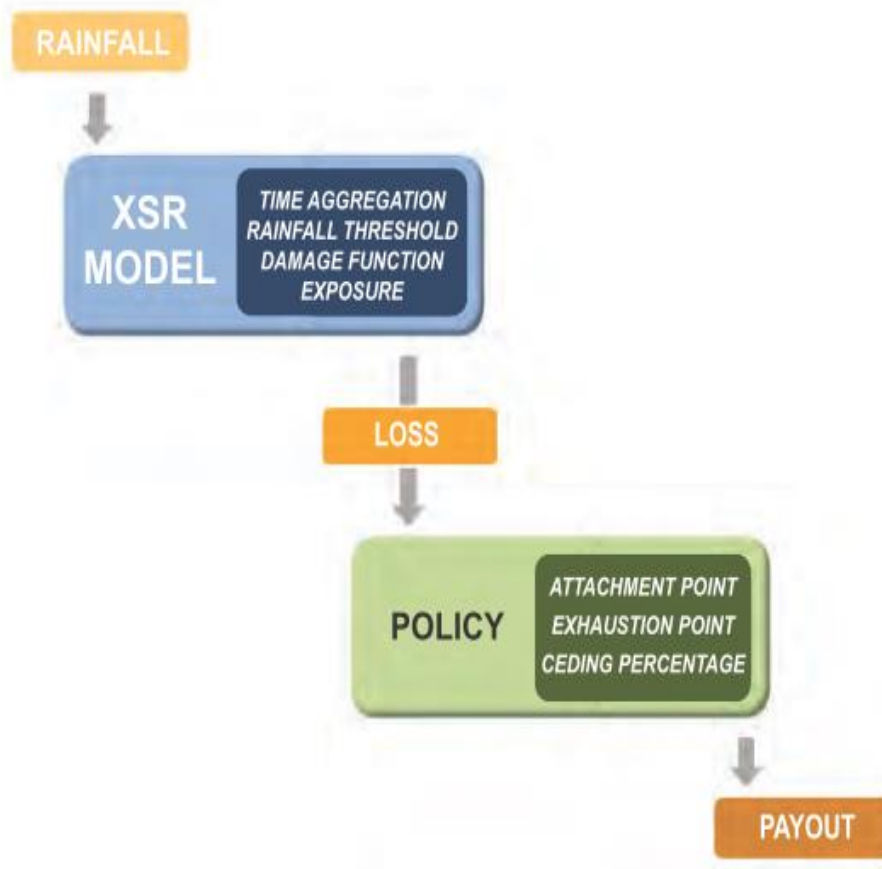
#### TC vs XSR

A country's excess rainfall policy is based on satellite rainfall data and is triggered independently of its tropical cyclone policy, which is based on wind and storm surge. 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 EXCESS RAINFALL MODEL 2.0

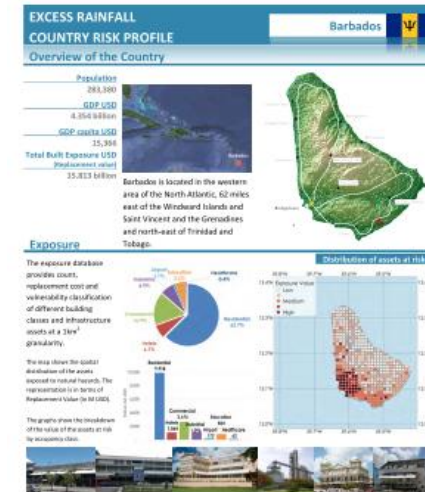
CCRIF completed modifications to the rainfall model that underpins the XSR product. The new model – the CCRIF SPC XSR Rainfall Model 2.0 – is aimed at simulating in real time the precipitation over a country and rapidly estimating the potential consequential losses.

The XSR Model is shown in the figure below.



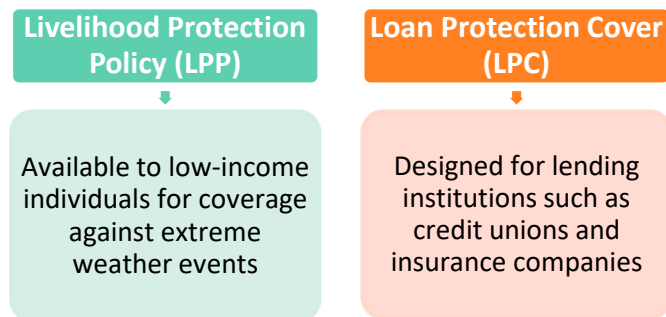
The daily **rainfall estimates** are derived through a combination of climatic-meteorological models – that accurately reproduce the intensity of the rainfall event – and a satellite-based precipitation model – that captures precisely, both spatially and temporally, the location of the rainfall caused by the event. The **exposure database** comprises information (number, area, economic value) about the different types of structures: residential buildings, commercial buildings, industrial facilities, hotels and restaurants, healthcare facilities, education assets, airports and ports, and the transportation (road) network. The **damage functions** relate the aggregated rainfall and losses. The **modelled losses** due to the XSR event are calculated and the **insurance module** – based on the **policy conditions** (attachment point, exhaustion point and ceding percentage) – determines if a country’s policy is triggered and computes the **payout** to the country. The brochure, *The CCRIF Excess Rainfall (XSR) Model*, published in April 2016, provides more details.

CCRIF created Excess Rainfall Country Risk Profiles based on XSR 2.0 for all CCRIF member countries. These were shared with members to inform their decisions about purchasing XSR policies for 2016/2017.



## MICROINSURANCE PRODUCTS

During 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 Livelihood Protection Policy (LPP) and Loan Portfolio Cover (LPC). 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. During 2015-2016, 356 LPP policies were sold: 332 in Jamaica and 24 in Saint Lucia.

The LPC is targeted at financial institutions that have significant portfolios of individual and micro, small and medium-sized enterprise

(MSME) loans exposed to weather risks, a large proportion of which can be affected by a single weather event. The LPC 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.

During 2015-2016, discussions were held with prospective countries for Phase II of the project. Implementation of Phase II is expected to begin in late 2016 and continue until 2019. As with Phase I, funding for Phase II will be provided by the BMU. To further 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 countries identified by MCII for participation in Phase II of the project are Jamaica, Grenada and Saint Lucia, for refinement and deepening of current efforts, and Belize and the Dominican Republic or Trinidad & Tobago for introduction to the products.

<b>Phase II Expected Outcomes</b>	To increase the number of low-income persons in the region who have access to climate risk insurance
	To increase the number of companies in the region offering climate risk insurance policies as well as microinsurance products
	To enhance sustainability of the initiative by increasing the scale through uptake by large target groups



## NEW PRODUCTS



**Fisheries**



**Agriculture**



**Drought**

### Caribbean Oceans and Aquaculture Sustainability Facility

CCRIF is engaged in an initiative of the United States Department of State, World Bank, United Nations Food and Agriculture Organization (FAO) and others to develop parametric insurance products to be marketed in the Caribbean to promote the resilience of the fisheries sector against increasing climate change-related disaster risks. In January 2015, US Secretary of State John Kerry authorized the commitment of US\$5 million to establish the Caribbean Oceans and Aquaculture Sustainability Facility (COAST).

The objective of COAST is to reduce the risk that climate change poses to food security and nutrition in the fisheries sector, and to mitigate climate change impacts on sustainable food production, where possible. A sub-objective of this initiative is to incentivize the uptake of climate-smart food security best practices within the fisheries sector in Caribbean nations to simultaneously improve food security as well as coastal resilience in the face of a changing climate.

In addition to the US\$5 million committed by the US Government, other development partners have indicated a willingness to contribute funding for this initiative with a goal of mobilizing a total of US\$20 million of donor funding to enable insurance coverage for approximately 180,000 fisherfolk and associated fishery and aquaculture industries. The new and innovative aspects of the insurance concept/initiative include enabling access of fishers and the fishery industry to insurance services at affordable premium rates and subsidizing insurance premiums related to application of best practice climate smart behaviour.



The overall development objective of COAST is to foster country-led climate smart food security and disaster risk management plans. A parametric insurance product for the fisheries sector will be an essential tool to



help address the impacts of natural hazards on food security and livelihoods of those working in the fisheries sector.

COAST is the third pillar of the World Bank-approved Caribbean Regional Oceanscape Program (“CROP”), a programmatic instrument to support coastal and island nations to fully realize the economic potential of their Exclusive Economic Zones within the Caribbean Sea.

In February 2016 CCRIF prepared the “Concept Note for Phase 1 of COAST Initiative Implementation: Operationalizing the COAST Project in the Caribbean: Expanding the Livelihood Protection Policy (LPP) to Incorporate the Fisheries Sector”. This note proposed the examination of the Livelihood Protection Policy to be used to operationalize insurance in the fisheries sector. Also to be considered are options for governments to play a key role in enabling fisherfolk to access the LPP by providing subsidies to fisherfolk to better guarantee the uptake of the product and/or to purchase a block of policies and provide payouts to fisherfolk from pre-determined fishing policies that have been triggered. To this end, three feasibility studies will be conducted in the next year to examine the introduction of a parametric insurance product for the fisheries sector – at the individual, meso (organization) and sovereign levels.

### **Parametric Insurance for the Agriculture Sector**

Since 2011, member governments have indicated the desire for CCRIF to develop a parametric insurance product for the agriculture sector – addressing not only excess rainfall and wind damage but also drought conditions. Stakeholders have indicated interest for an agriculture product at three levels: sovereign, individual, and organization/community. The LPP provides insurance for the agriculture sector at the individual level – but based only on excess rainfall and wind. CCRIF has engaged in discussion with organizations such as the Caribbean Development Bank and the European Union (through its Banana Accompanying Measures (BAM) initiative) regarding the development of coverage specifically for the agriculture sector at all three levels.

### **Development of a Drought Product**

The inaugural meeting of the Multi-Donor Trust Steering Committee in October 2015 further confirmed the significant need for drought insurance for both Central American and Caribbean countries. This demand was also demonstrated by persons in Saint Lucia and Jamaica who were interested in the Livelihood Protection Policy. CCRIF is developing a drought model, which was approved by the Board in early 2016. Work was then commissioned to build a drought product. The methodology and timeline will be developed to take advantage of linkages with the initiatives regarding the agriculture product and the LPP.

# EVENT REPORTING - TROPICAL CYCLONES, EXCESS RAINFALL AND EARTHQUAKES

The infographic consists of three overlapping boxes. The leftmost box is purple and labeled 'REPORTABLE EVENT'. The middle box is green and labeled 'LOSS EVENT'. The rightmost box is blue and labeled 'TRIGGERING EVENT'. Each box contains definitions for Tropical Cyclone, Excess Rainfall Event, and Earthquake.

**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 5.0 or greater 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 Event:**  
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.

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 at left provides definitions of these terms. Note that one tropical cyclone event can generate both a tropical cyclone and an excess rainfall report.

## REPORTABLE EVENTS 2015/16 POLICY YEAR

In 2015/2016, a total of 17 hazard events were reported as shown in the table below. These included one triggering event – Tropical Storm Erika, which affected Dominica in August 2015. The section on **Payouts during 2015/16** provides details.

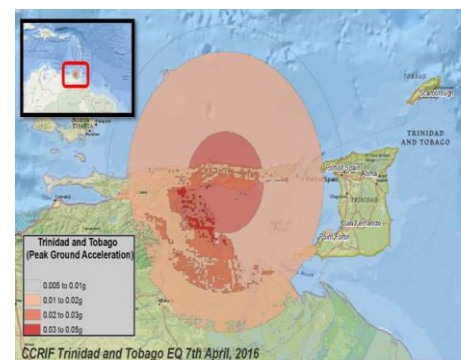
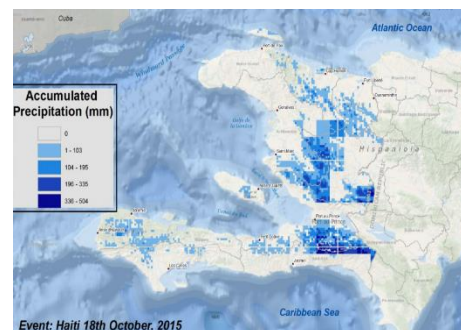
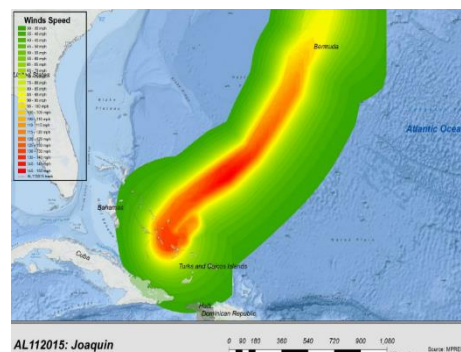
Detailed event briefings for each reportable event are available on the CCRIF website - [www.ccrif.org](http://www.ccrif.org).

# HAZARD EVENTS 2015/2016

- A total of 17 hazard events were reported:
  - 3 tropical cyclones
  - 7 excess rainfall events (2 during tropical cyclones)
  - 7 earthquakes
- 12 of the 17 CCRIF member countries were affected

Date	Event	Event Type	CCRIF Member Countries Affected
16 July 2015	6.4 earthquake	EQ	Barbados
24 August 2015	Tropical Cyclone Danny	TC	Dominica
<b>27 August 2015</b>	<b>Tropical Storm Erika</b>	<b>XSR</b>	<b>Dominica</b>
30 September - 6 October 2015	Tropical Cyclone Joaquin	XSR	Haiti, Jamaica, The Bahamas
9 October 2015	Tropical Cyclone Joaquin	TC	The Bahamas, Bermuda, Turks & Caicos Islands
18 October 2015	Rain event	XSR	Haiti
20 October 2015	Rain event	XSR	Turks & Caicos Islands
7 - 9 November 2015	Rain event	XSR	Haiti
9 November 2015	Rain event	XSR	Grenada
28 December 2015	5.6 earthquake	EQ	Dominica, Saint Lucia
31 December 2015	5.7 earthquake	EQ	Nicaragua
5 January 2016	5.0 earthquake	EQ	Trinidad & Tobago
23 January 2016	Rain event	XSR	Haiti
26 February 2016	Rain event	XSR	Haiti
19 March 2016	6.0 earthquake	EQ	Antigua & Barbuda
7 April 2016	5.2 earthquake	EQ	Grenada, Trinidad & Tobago
20 April 2016	5.8 earthquake	EQ	Barbados, Saint Lucia

**1 triggering event occurred: rain event during Tropical Storm Erika - 27 August 2015**





## PAYOUTS DURING 2015/16



CCRIF made a payment of US\$2.4 million to the Government of Dominica under the Excess Rainfall Programme as a result of rains that occurred during Tropical Storm Erika on 27 August 2015.

Dominica's excess rainfall coverage complements its tropical cyclone insurance policy, which is based on damages caused by wind and storm surge.

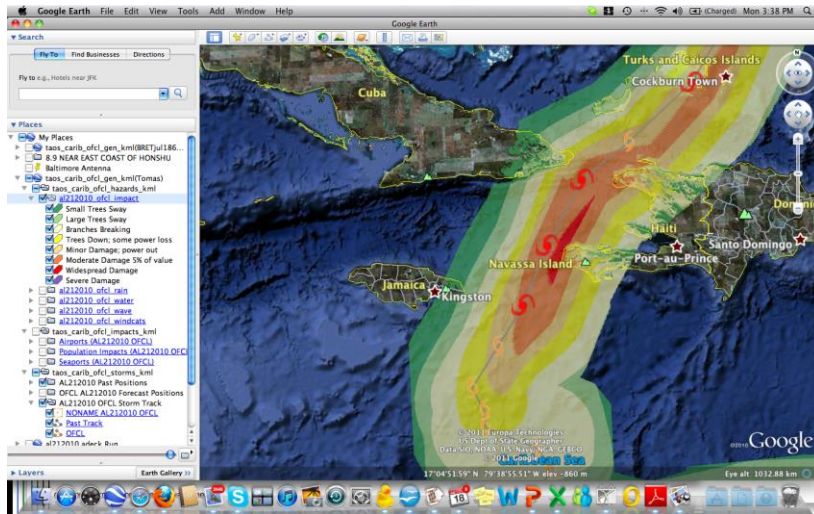
On 27 August 2015, Tropical Storm Erika, passed through Dominica producing extraordinary rainfall with high intensity. The heavy rainfall caused significant and rapid flooding, which resulted in widespread landslides and severe infrastructural damage, primarily to transportation, housing and the agriculture sector. Tropical Storm Erika resulted in total damages and losses of US\$483 million, equivalent to approximately 90 per cent of Dominica's Gross Domestic Product (GDP) following initial assessment of impacts to all the sectors.

The storm had a strong human impact also with 30 persons confirmed dead, 574 homeless and 713 evacuated with approximately 7,229 impacted by the event in the disaster declared areas, out of a total population of over 72,000 persons.

*Adapted from Report, "Tropical Storm Erika Devastates Dominica", prepared by CCRIF interns at UWI Disaster Risk Reduction Centre, October 2015.*

## CCRIF'S SERVICES AND TOOLS

### THE CCRIF REAL-TIME FORECASTING SYSTEM



CCRIF makes its 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 RTFS is an integrated, 3D high-resolution modelling platform which is able to produce detailed information on the expected hazard levels and their impacts from tropical cyclones for the entire Caribbean region. The RTFS therefore enables all active members of CCRIF to access real-time estimates of the expected hazard levels and impacts on population and infrastructure for all tropical cyclones during the hurricane season. Decision makers can use the RTFS in contingency planning, shelter management and emergency interventions.

National Weather Forecast Offices (WFOs) use forecasts prepared by the National Hurricane Center (NHC) as well as RTFS outputs to provide products that describe expected local hurricane hazards in order to guide local decisions in Caribbean countries. The RTFS gives the WFOs additional information on the expected impacts related to the hazards of tropical storms. The Caribbean Institute for Meteorology and Hydrology (CIMH) is the liaison between emergency managers, the NHC, local WFOs, the Caribbean Disaster Emergency Management Agency (CDEMA) and other agencies. CIMH provides to CDEMA special weather interpretation of the current and forecasted tropical weather affecting the Caribbean region and interpretation of the tropical cyclone forecasts and the related observations. CIMH provides Weather Briefings to CDEMA, which then disseminates them throughout the region. The briefings include, among other information, analysis of storm impacts based on RTFS outputs and data overlays using the Caribbean Dewetra Platform, which uses outputs from the RTFS to inform its impact models.

The data provided by the RTFS provides important information not provided by the NHC, including:

- Impact information such as wind, wave, storm surge footprints, impacts on airports, ports and building – providing damage estimates
- Archival data - past track and current forecast tracks for all model forecasts, which can be used for training purposes, testing emergency management response etc.
- Storm surge impacts for the Caribbean

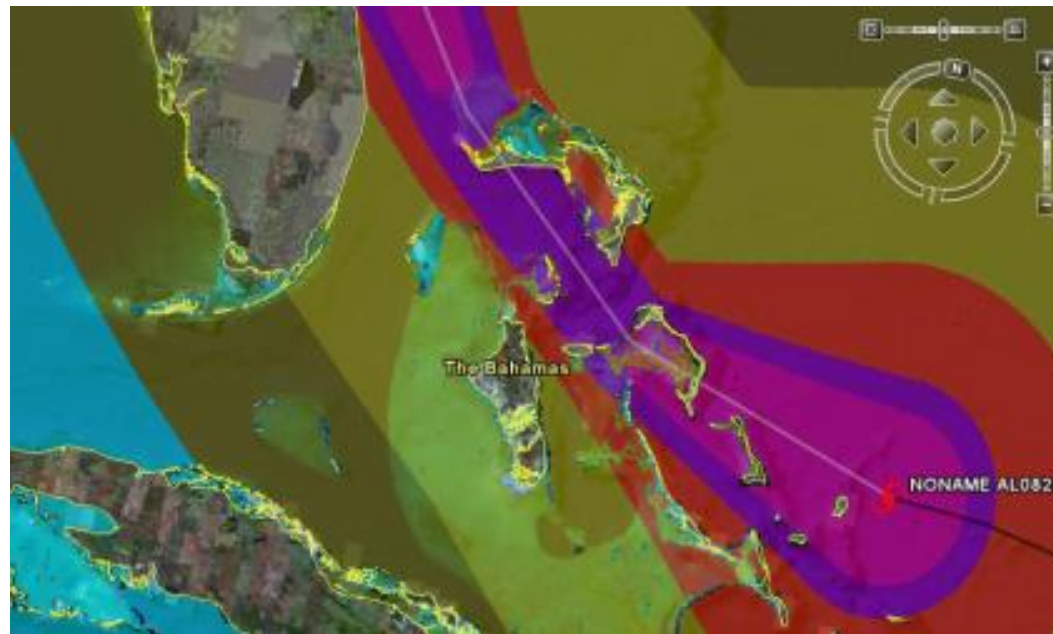


- Simulated impacts for earthquakes from direct translations of certain earthquake characteristics into a hazard footprint, showing the ground acceleration footprint and the population affected by level of intensity

At the end of the year, the total number of persons with access to the RTFS was 362, including 40 new accounts created during the 2015 Atlantic Hurricane Season. 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. In 2015-2016, the RTFS was accessed 30 times – most often from Barbados during Tropical Storm Erika.

In December 2015, CCRIF prepared a briefing on the RTFS, examining the feasibility for its commercialization for other users such as researchers and educators in meteorology, hydrology, seismology, disaster management, risk modelling etc., private sector trainers of meteorologists, disaster managers and decision makers; marine/shipping practitioners; decision makers in electricity, water and telecommunications utilities and national development planners.



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



Launched in 2010, CCRIF's Technical Assistance (TA) Programme in 2010 was designed to provide an ongoing mechanism for grant support within the Caribbean region for capacity building initiatives and the development and implementation of projects which have a strong potential for improving the effectiveness of risk management. It also was designed to support programmes and projects that are presently not funded or not fully funded by traditional donor agencies. The programme also was a response to the increasing and ad hoc requests by organizations and regional entities for support for capacity building and implementation of much needed projects.

The main aim of the TA Programme is to assist Caribbean countries deepen their understanding of natural hazards and catastrophe risk, and the potential impacts of climate change on the region. There are three components of the TA Programme.

- **Component 1** focuses primarily on support for tertiary level scholarships as well as support for professional development programmes
- **Component 2** focuses on regional knowledge building and involves the development and implementation of strategic regional projects in support of disaster risk management (DRM) and other areas of direct and indirect interest to CCRIF
- **Component 3** provides support for local disaster risk management projects and programmes

As CCRIF is a not-for-profit organization, the resources made available for the TA Programme are derived from a maximum of 50 per cent of earned investment income as reported in the facility's audited financial statements of the previous policy year. The actual amount approved for disbursement for each year is then determined by the board of directors following approval of the audited of financial statements of the previous year.

# ★ CCRIF SCHOLARSHIP PROGRAMMES 2010 - 2016 ★

**47 scholarships worth US\$739,311  
to students from 12 Caribbean countries**



## Overview

### CCRIF-UWI Scholarship Programme

Provides scholarships to post-graduate and undergraduate students who are pursuing study at the University of the West Indies in areas related to disaster management at all three campuses

### 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)



## Value of Scholarship

Post-graduate: US\$11,000  
Undergraduate: US\$8,000

Up to US\$40,000



## Number of Scholarships awarded 2010-2016

**36**

**11**



## Total value of scholarships awarded 2010-2016

**US\$331,750**

**US\$407,561**

## CCRIF-UWI SCHOLARSHIP PROGRAMME

CCRIF awarded post-graduate and undergraduate scholarships to seven students at the University of the West Indies for the 2015/2016 academic year. Undergraduate scholarships are provided to students in their second year and will continue in their third year if they maintain the requisite standards. The scholarship recipients in 2015 are shown in the table below.

Recipient & Country	Degree Programme & Campus
<b>UWI Postgraduate Recipients</b>	
<b>Amanda McKenzie Jamaica</b>	MSc Natural Resource and Environmental Management – Integrated Urban & Rural Environmental Management, Mona
<b>Camile Bolton Jamaica</b>	MSc Natural Resource and Environmental Management – Integrated Urban & Rural Environmental Management, Mona
<b>Phillipa Ricketts-Edmund Jamaica</b>	MSc Natural Resource and Environmental Management – Integrated Urban & Rural Environmental Management, Mona
<b>UWI Undergraduate Recipients</b>	
<b>Kristina Dougherty Jamaica</b>	BSc Geography, Mona
<b>Romane Chisholm Jamaica</b>	BSc Geography, Mona
<b>Kellesia Williams Trinidad &amp; Tobago</b>	BSc Civil Engineering, St. Augustine
<b>Osei Martin St. Vincent &amp; the Grenadines</b>	BSc Civil Engineering, St. Augustine

## CCRIF SCHOLARSHIP PROGRAMME

CCRIF awarded two post-graduate scholarships in 2015 totalling US\$77,000 for students to study in the USA and UK. The scholarship recipients in 2015 are shown in the table below.

Recipient & Country	Degree Programme & University
<b>Anita Wilson Guyana</b>	MS Natural Resources with a concentration in Leadership for Sustainability, University of Vermont, USA
<b>Shanea Young Belize</b>	MSc Applied Meteorology, University of Reading, UK

In 2011, as an employee of the Belize Meteorological Service, Ms. Young was the recipient of a CCRIF scholarship to obtain a BSc in Meteorology at UWI as part of a technical assistance initiative to provide support to the Government of Belize.



*Scholarship Recipient,  
Shanea Young*



# CCRIF Regional Internship Programme

Launched in 2015

45 interns from 8 countries placed in 18 national and regional organizations in the first 2 years

## INTERN HOME COUNTRIES

Antigua & Barbuda • Barbados • Dominica • Grenada • Guyana • Jamaica • St. Kitts & Nevis • Trinidad & Tobago

### HOST ORGANIZATIONS

- Caribbean Community Climate Change Centre - CCCCC
- Caribbean Development Bank - CDB
- Caribbean Disaster and Emergency Management Agency - CDEMA
- Caribbean Institute for Meteorology and Hydrology - CIMH
- Organisation of Eastern Caribbean States Commission - OECS
- University of the West Indies – UWI
  - Climate Studies Group Mona
  - Disaster Risk Reduction Centre
  - Department of Geology and Geography, Mona
  - Department of Geography, St. Augustine
  - Seismic Research Centre
  - Centre for Marine Sciences
  - Centre for Resource Management & Environmental Studies - CERMES
- Anguilla Department of Disaster Management - DDM
- Barbados Department of Emergency Management - DEM
- Hazard Management Cayman Islands - HMCI
- Saint Lucia National Emergency Management Organisation - NEMO
- Tobago Emergency Management Authority - TEMA
- Trinidad & Tobago Meteorological Service - TTMS

### SOME PROJECTS/RESULTS

- Documentation of valuable baseline country-specific climate data to assist the CDB's analysis of countries' climate change issues
- Assisting CDEMA in its response to storms Erika and Joaquin
- Development of flood forecasting models with CIMH
- Research on geothermal systems in the Caribbean with the SRC
- Assisting with Saint Lucia's Five Year Multi-Sectoral Disaster Risk Reduction Work Programme for NEMO
- Assisting with Psychological First Aid workshop for Barbados DEM
- Valuation of products and services provided by TTMS
- Assistance at CCCCC in preparing readiness proposal for the Government of Guyana to access the Green Climate Fund - approved for funding of US\$300,000 at COP21

*Total investment of **US\$140,000** in 2 years*


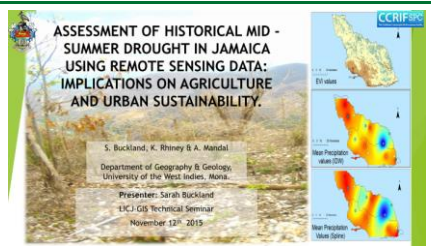
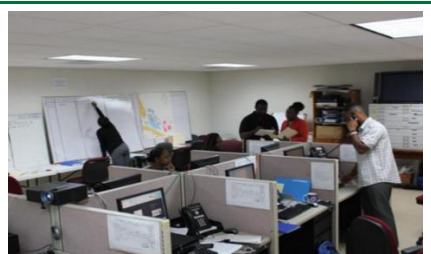


## CCRIF INTERNSHIP PROGRAMME

Launched in March 2015, the Regional Internship Programme 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 2015, CCRIF placed 20 interns at 10 national and regional organizations, with an investment of US\$74,000. Host organizations and interns expressed satisfaction with the programme, and in some cases, host organizations retained the services of the interns beyond the CCRIF internship period – including CDB, which offered each of its two interns subsequent two-year internships.

### Some examples of interns' work

	<p>Mahendra Saywack assisted CCCCC in preparing a readiness proposal for the Government of Guyana to access the Green Climate Fund, which was approved for funding of US\$300,000. The Grant Agreement was signed in December 2015 on the sidelines of COP 21 in Paris. The funds will be used to support the preparation of the critical infrastructure needed to realize Guyana's Intended Nationally Determined Contributions to greenhouse gas emissions reductions.</p> <p>Mr. Saywack also was a CCRIF scholarship recipient in 2012 and completed an MSc in Climate Change and Development at the University of Sussex in the UK.</p>
	<p>Sarah Buckland was the lead presenter on the assessment of drought in Jamaica and its implications on agriculture at the Geography Awareness Week symposium in November 2015 hosted by the Land Information Council of Jamaica. She conducted this research as part of her internship at the Department of Geography and Geology, UWI Mona.</p> <p>Ms. Buckland also was a recipient of a CCRIF scholarship at UWI in 2013 where she completed a BSc in Geography.</p>
	<p>Among other tasks, Ryan Proverbs served in the role of Assistant Operations Officer at the Regional Coordinating Centre of CDEMA during Hurricane Joaquin.</p> <p>This included liaising with the National Disaster Management Offices of The Bahamas, Haiti and the Turks and Caicos Islands.</p>

## CCRIF SMALL GRANTS PROGRAMME

Launched in March 2015, the CCRIF Small Grants Programme provides financing for small projects in local communities by non-governmental organizations (NGOs), community-based organizations (CBOs) and charity organizations – as well as academic institutions – across CCRIF member countries and/or CARICOM member countries. The programme provides funds of \$5,000 - \$25,000 per project.

Four grants were awarded during 2015-2016:

Organization & Country	Project & Activities Implemented by May 2016
Fondation Amour de Dieu en Action (FADA) Haiti	Agricultural training project to enhance capacity to address climate change of farmers in the northern department of Haiti affected by the flooding of November 2014
Groupe Encadré du Nord-Ouest (GAENO) Haiti	Reforestation project around the pond Fond Zombi to improve resilience to landslides and flooding Activities included: <ul style="list-style-type: none"> <li>Conducted training on planting plants for students and community members</li> <li>Held a tree planting activity on Republic of Haiti Flag Day – 18 May</li> </ul>
Department of Food Production, University of the West Indies, St. Augustine, Trinidad & Tobago (regional impact)	Conservation Agriculture for Climate Change Adaptation in the Caribbean project to improve the resilience of crop production systems to excess and intense rainfall
Douglas Castle Production and Market Organization Jamaica	Project to develop a Community Disaster Risk Management Plan for Douglas Castle, one of the communities in the parish of St. Ann that is most vulnerable to flooding



Activities implemented by GAENO March - May 2016

UWI's Conservation Agriculture for Climate Change Adaptation in the Caribbean project was conceptualized to address findings from the Masters thesis of 2012 CCRIF scholarship recipient Mahendra Saywack, entitled "Climate Smart Agriculture: Can It Be Achieved?" The study determined that the Caribbean was not reaping the benefits from conservation agriculture due to the region's unique environmental and socio-economic conditions. Thus, proof-of concept empirical studies were needed before these practices are adopted on a large scale.

The project findings will provide guidelines for regional policy makers and agricultural practitioners on land use policy and climate change adaptation measures.

### **SPECIAL ASSISTANCE FOR POST-EVENT RECOVERY AND REHABILITATION EFFORTS**

The CCRIF Board has provided targeted technical assistance and support to governments following the occurrence of certain natural hazard events which significantly affected member countries. Previous examples of this assistance to date are initiatives following the occurrence of the earthquake in Haiti in 2010, Hurricane Richard (2010) and Hurricane Sandy (2012).

In February 2016, CCRIF provided a grant of US\$100,000 to the Government of Dominica towards recovery efforts after Tropical Storm Erika that caused great damage to the country in August 2015. Based on priorities of the Government, the funds were to be used towards the rehabilitation of the Douglas Charles Airport.

### **COUNTRY RISK MANAGEMENT IN THE SMALL STATES OF THE CARIBBEAN**

CCRIF and the Caribbean Development Bank signed a letter of intent to forge a partnership for a regional country risk management (CRM) initiative which would allow for countries to take a more proactive approach towards country risk management. This will involve countries moving beyond planning for disaster risks such as climate change and other extreme events and recognizing the intrinsic linkages between disaster risk and other types of risk such as economic, technological and financial risks and the impacts of these on socioeconomic development and current attempts to transition to a green economy.

would act as a central point of contact for the purposes of managing a comprehensive multi-area risk portfolio. This is a task that would require a high degree of coordination between the various levels of government and administration, private sector operations including the insurance industry.

A work plan was developed for implementation in the next fiscal year. The plan includes the preparation of a situational and comparative analysis on CRM in the Caribbean and a gap analysis to inform the development of terms of reference for country risk coordinators and the integrated risk management framework.

It is anticipated that this initiative will enable the development of a standardized integrated risk management framework for use throughout Caribbean countries and will also advance the institutionalization of country risk coordinators within countries who

CCRIF and CDB will work closely with CDEMA and the OECS Commission on the advancement of this initiative.

## CORPORATE AND FINANCIAL INTEGRITY

### PROGRESS AGAINST TARGETS

Each quarter, CCRIF measured the progress made from the beginning of the fiscal year to the end of that quarter. Progress under each strategic objective was compared to the targets set for 2015-2016 in the CCRIF Strategic Plan 2015-2018. The graph below presents the progress against targets made by CCRIF during the 2015/2016 fiscal year.

#### Summary of Performance Against Targets for FY 2015/2016

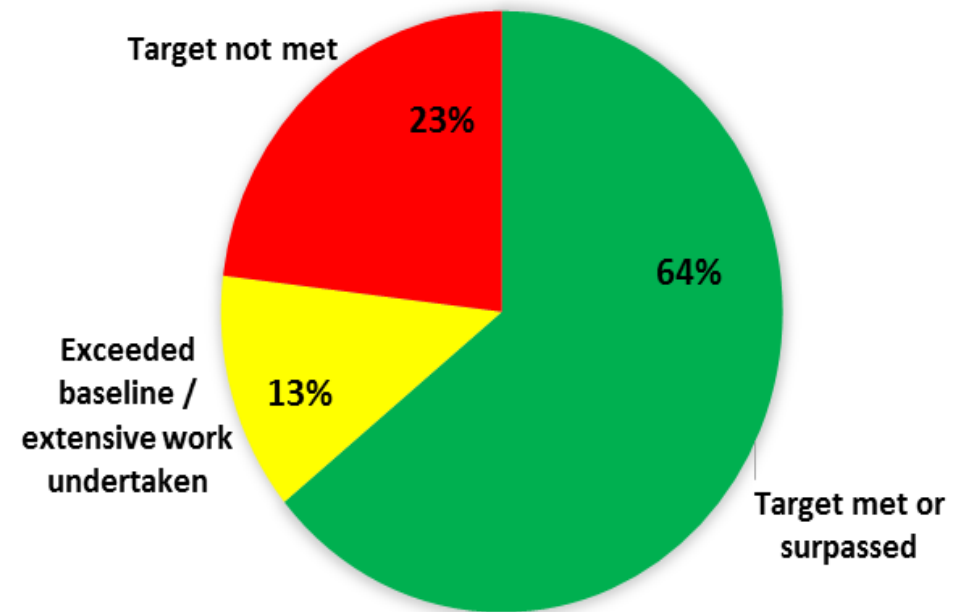
Number of targets: 39

Performance during this fiscal year:

- 25/39 (64%) – target met or surpassed
- 5/39 (13%) – exceeded baseline / extensive work undertaken towards the target
- 9/39 (23%) – target not met

Some of the areas in which targets were met or surpassed are:

- Maintain existing # policies - all members renewed their existing hurricane, earthquake and excess rainfall policies for 2015/2016
- Enhanced capacity – through scholarships and training
- Sustainable claims paying capacity – the probability of default, minimum claims paying capacity, rating of financial strength of reinsurers and bond holders and turnaround time for paying claims (14 days) all met the stated targets
- Strong governance framework – the Annual Report was prepared and an internal audit conducted
- Information sharing – through publications, conferences/meetings and media coverage
- Current members retained
- Increase in donor capitalization



## DONOR FUNDING FOR CCRIF

CCRIF was originally developed under the technical leadership of the World Bank and with a grant from the Government of Japan. It was initially capitalized through contributions to a Multi-Donor Trust Fund (MDTF) by the Government of Canada, the European Union, the World Bank, the governments of the UK and France, the Caribbean Development Bank, the governments of Ireland and Bermuda, and membership fees paid by participating governments.

CCRIF SPC is continually engaging with development partners and donors to increase its capitalization to provide additional support to its current members and to support expansion for new countries. This year, CCRIF increased its donor funding as shown in the table at right. This reflects renewed efforts from donors and the international community to address increasing global climate and disaster risks.

Donor	Amount	
European Commission	€14 million (~US\$15.4 million)	For Central America
Government of the United States	US\$10 million	For Central America
Government of Canada	Can\$16.5 million (~US\$12 million)	For Central America

## COMMITMENTS FOR CLIMATE CHANGE FINANCING THROUGH CCRIF

At the Emlau G7 Summit in June 2015, the G7 leaders announced action to support efforts by vulnerable developing countries to manage climate change-related disaster risk through insurance, with an aim to increase the number of people with access to direct or indirect climate risk insurance coverage by up to 400 million by 2020 and that this commitment will build upon existing risk insurance facilities such as CCRIF. At



COP 21 – the 21<sup>st</sup> Conference of Parties of the United Nations Framework Convention on Climate Change (UNFCCC) – in December 2015, United States President Barack Obama pledged US\$30 million to support CCRIF, the Africa Risk Capacity (ARC) and the Pacific Catastrophic Risk Assessment and Financing Initiative (PCRAFI) to increase climate risk insurance coverage for developing countries.



## CENTRAL AMERICA MULTI-DONOR TRUST FUND



*L-R: H.E. Ivan Acosta – Minister of Finance of the Republic of Nicaragua; Mr. Jorge Familiar – Vice President, Latin America and the Caribbean Region, World Bank; Mr. Neven Mimica – EU Commissioner for International Cooperation and Development, Mr. Milo Pearson, Chairman, CCRIF SPC; Mr. Martin Portillo – Executive Secretary, COSEFIN; Mr. Jose Francisco Pacheco – Vice Minister, Ministry of Finance, Costa Rica*

On April 15, 2016, the European Commission and the World Bank signed a €14 million agreement to be executed by the Multi-Donor Trust Fund to facilitate access to catastrophe risk insurance for the governments of Central American countries and the Dominican Republic by becoming members of CCRIF SPC. This contribution is a reflection of the EU's stated concern for the need to support countries towards building resilience to disasters and climate change, which has led to an increase in funding for climate change in the EU's development priorities.

This engagement is part of renewed efforts from donors and the international community to address increasing global climate and disaster risks. As part of this engagement, countries have recently

adopted new agreements (such as the Sendai Framework for Disaster Risk Reduction, the Addis Ababa Agenda for Action of the Third International Financing for Development Conference, and Transforming Our World: Agenda 2030 – the global goals for sustainable development) to pledge priority funds and support efforts to manage and finance disaster risk in developing countries.

At the signing ceremony, Mr. Neven Mimica – EU Commissioner for International Cooperation and Development stated *“The European Union's contribution to this Multi-Donor Trust Fund for Central America countries and the Dominican Republic is a reflection of our shared concern for the need to support partner countries towards building resilience to disasters and climate change; a concern that has*

*led to an increase in funding for climate change in the EU's development priorities.”*

Mr. Jorge Familiar – Vice President, Latin America and the Caribbean Region, World Bank stated that *“For small economies, tackling climate and disaster risks effectively requires efforts at the regional level, since effective solutions call for risk pooling. This is critical for Caribbean and Central American countries that are increasingly vulnerable to the effects of climate change. The facility is a good example of a regional public good where member countries will be able to benefit from insurance coverage at a more affordable rate.”*

In addition to the EU’s contribution, the governments of Canada and the United States also have pledged funds to the MDTF, totaling approximately US\$22 million to date in support of COSEFIN countries’ participation in CCRIF SPC. Donor contributions play a critical role in enabling countries to benefit from CCRIF insurance coverage at more affordable rates.

## GOVERNANCE AGREEMENT



In November 2015, CCRIF and the CARICOM Secretariat met to renew discussions on a Memorandum of Understanding to formalize a partnership for the establishment of CARICOM as the permanent Enforcer for CCRIF SPC, required under Cayman Islands law to ensure that CCRIF is administered to satisfy the purpose for which it was established. The MOU sets out the basic principles to guide the formalization of the role of CARICOM in providing the “Enforcer” for the Caribbean EQ-TC, XSR and Loan Portfolio Cover SPs and their respective assets that are owned by the CCRIF STAR Trust.

## CCRIF’S FINANCIAL STABILITY

CCRIF SPC issued 29 annual policies for EQ/TC to 16 CARICOM countries for the 2015/2016 policy/financial year, 12 policies for the XSR product, and one policy for Nicaragua EQ/TC. The year’s premium income totalled US\$11.0 million, for tropical cyclone and earthquake coverage. CCRIF’s aggregate exposure for policies written was US\$659 million, with the tropical cyclone to earthquake aggregate split being close to 57:43. Annual premia from the XSR policies added up to US\$5.8 million, covering an aggregate exposure of more than US\$64 million in member countries. For the Nicaraguan policy, the premium income was US\$1.5 million, covering a total exposure of US\$18.0 million.

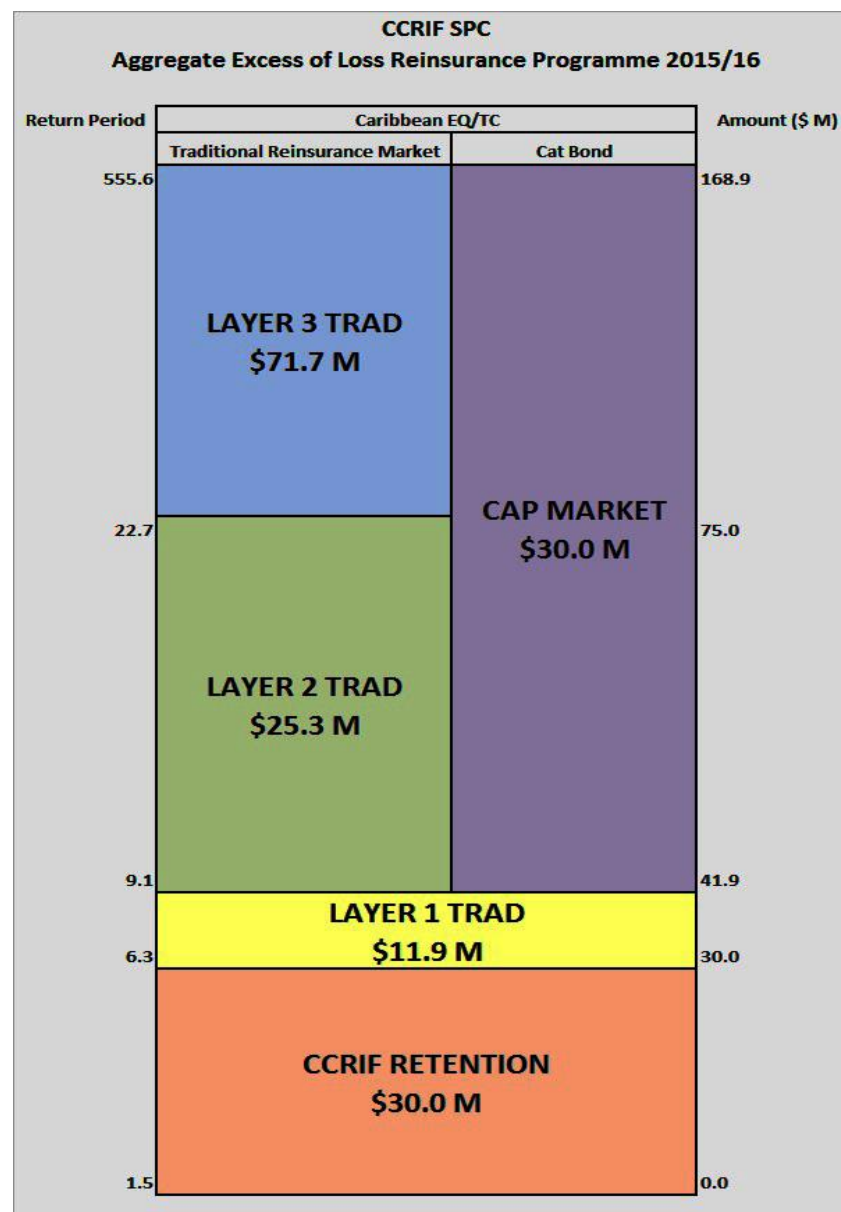
CCRIF SPC for Caribbean EQ/TC retained US\$30 million and purchased an additional US\$138.9 million of reinsurance capacity above retention to support the claims paying capacity of the facility (see figure below). Reinsurance was purchased from the international reinsurance markets, including Swiss Re, 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\$168.9 million, provided claims paying capacity for aggregate annual losses with an approximately 1-in-555.6 chance of occurring.

The XSR SP retained US\$7.0 million and purchased a cover of a single layer for US\$35.0 million above the retention, providing a claims paying capacity for aggregate annual losses with an approximately 1-in-205 chance of occurring. The Central America SP retained US\$1.5 million and purchased a multilayer insurance structure, ceding US\$6.0 million in the first layer, and US\$10.0 million in the second layer, which brings its paying capacity to a 1-in-1,500 chance of occurring.

CCRIF SPC's total capital at risk for 2015/2016 comprised the retention of US\$30 million within the risk transfer programme and a further ~US\$15.5 million above the reinsurance programme up to the 1-in-1,000-year loss of ~US\$184.4 million. The claims paying capacity of CCRIF for the 2015/2016 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.

### INTERNAL GOVERNANCE

CCRIF retained KPMG as its internal auditor for the year 2015/2016, and contracted two reviews in keeping with the Internal Audit Plan. The reviews focused on Corporate Governance and Information Technology. CCRIF is committed to best practices in providing assurance to the CCRIF Audit Committee and management on the effectiveness of risk management, control and governance processes for the benefit of all stakeholders.



## DEEPENING KNOWLEDGE AND UNDERSTANDING OF CATASTROPHE RISK AND THE SOLUTIONS CCRIF PROVIDES

### COMMUNICATIONS

Communication with stakeholders is important to CCRIF and the facility interacts with members and other stakeholders through face-to-face and teleconference meetings, workshops and participation in regional and international conferences. Social media channels (e.g. Twitter and Facebook) and the CCRIF website are key tools for sharing information on CCRIF and disaster risk reduction and climate change issues. As noted in the section on **Strategic Objective 5**, to support our current and potential members from Central America, CCRIF has begun to implement communication in Spanish, for example through Spanish versions of publications and press releases and facilitating multi-language support by the CCRIF website.

### PUBLICATIONS

CCRIF regularly 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.

CCRIF produced a 4-part video series entitled, “The Role of Insurance in Mitigating Natural Disaster and Climate Risks – The Experience of CCRIF SPC”, which covers all aspects of CCRIF’s operations. This series was designed so that each part is a self-contained standalone unit that describes a certain aspect of CCRIF and can be viewed on its own



or in conjunction with other parts, depending on the event and target audience. The videos are available on the CCRIF website and on YouTube.

The CCRIF video series:

- Part 1: About CCRIF
- Part 2: Understanding Parametric Insurance
- Part 3: CCRIF – An Internationally Recognized Example of an Innovative Risk Transfer Solution
- Part 4: CCRIF’s Contribution to Disaster Risk Reduction in the Caribbean and Reducing Vulnerabilities



During the policy year 2015/16, CCRIF also produced over 30 publications including:

- CCRIF Annual Report 2014-2015
- *Understanding CCRIF – A Collection of Questions and Answers* (February 2016 Edition) – English and Spanish
- Technical Paper - Understanding CCRIF's Hurricane, Earthquake and Excess Rainfall Policies (November 2015 Edition) – English and Spanish
- *2016/2017 Policy Renewals* country briefings and presentations for Caribbean and Central American members
- *CCRIF Excess Rainfall (XSR) Model* brochure - English and Spanish

Also, CCRIF provided input into the World Bank's Insights series #10: *The Caribbean and Central American Partnership for Catastrophe Risk Insurance: Creation of a Regional Partnership for Financial Resilience*

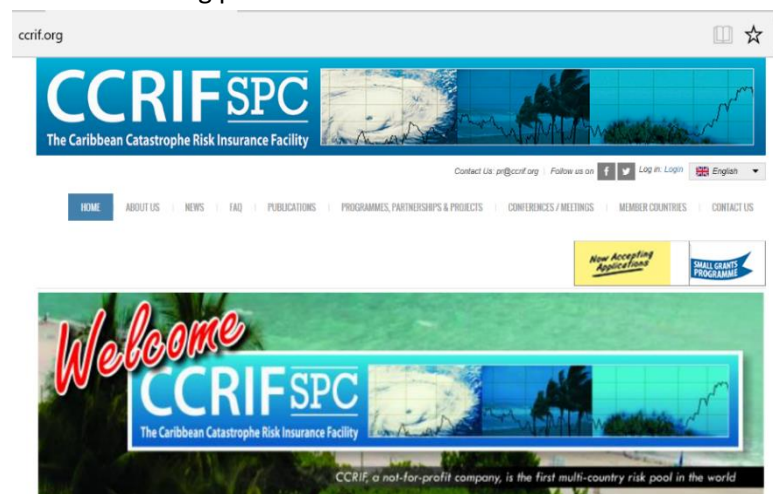


The Caribbean and Central American Partnership for Catastrophe Risk Insurance: Creation of a Regional Partnership for Financial Resilience

## PUBLIC RELATIONS AND MEDIA / CCRIF WEBSITE AND SOCIAL 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 hosting media events and issuing press releases.

Also, CCRIF uses the CCRIF website – and increasingly CCRIF's social media channels, Facebook and Twitter – to raise awareness of CCRIF's activities and news as well as other issues related to disaster risk management and climate change. Furthermore, these channels allow for two-way communication and allow stakeholders to contact CCRIF with queries and requests for more information about issues of importance to them.



The CCRIF website was redesigned this year. Changes included, among others, the addition of multi-language support and a feedback form. This year, the website was accessed 22,478 times – an increase of 24 per cent over the previous year and a 170 per cent increase over the 8,300 visits in CCRIF’s first year. This year, visitors came from over 170 countries and the United States continued to be the country with the most visitors, with approximately 17 per cent of the total visits, followed by Jamaica with approximately 14 per cent of the visits.

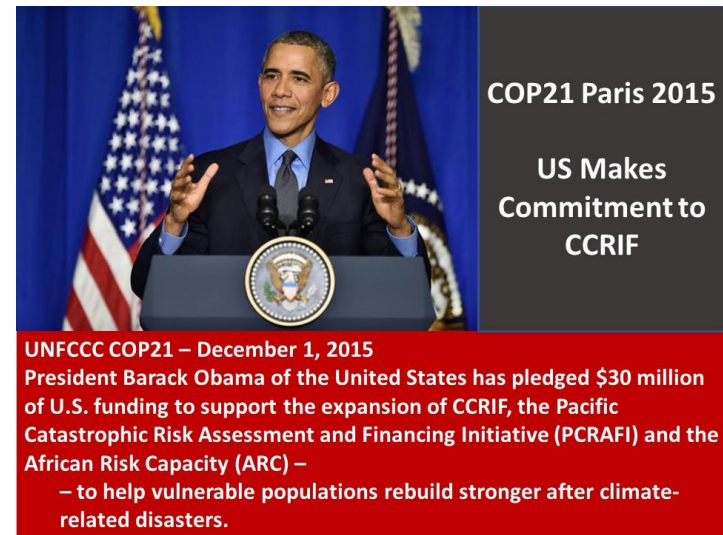
### Impact of CCRIF's social media channels

- 20 per cent of visits to CCRIF website from social media referrals
- Over 11,000 Facebook followers – up from 2,000 the previous year
- Over 150,000 persons on average view and read CCRIF posts regularly
- 264 Twitter followers – up from 229 the previous year

CCRIF issued the following press releases and major Facebook posts:

- 12 August 2015 - CCRIF Members Confirm Catastrophe Insurance Portfolios for Hurricanes, Earthquakes and Excess Rainfall for 2015/2016
- 10 September 2015 - CCRIF pays Government of Dominica EC\$6.5 million under its Excess Rainfall Programme following Tropical Storm Erika
- 16 April 2016 - European Commission and World Bank Sign Agreement on Catastrophe Risk Insurance for Caribbean and Central American countries
- Call for applications for CCRIF Regional Internship Programme
- Call for applications for CCRIF Scholarship Programme
- Announcement of US President Obama's pledge at COP 21 to support CCRIF

CCRIF continues to be recognized as a best practice example in areas related to insurance, disaster risk management and climate change adaptation and is often referenced in articles written in a wide range of international and regional journals and news outlets as well as through social media channels of other organizations.



*Policymakers in Asia therefore have every incentive to transfer risks. Poorer countries are less able to afford the “premiums” that catastrophe-bond issuers pay to investors in return for protection. But countries such as Bangladesh and Nepal could benefit from a regional risk-pooling mechanism like the Caribbean Catastrophe Risk Insurance Facility, a multi-country disaster-relief fund set up in 2007. This is a donor-backed scheme for the rainiest of days, into which Caribbean governments also pay a contribution. The CCRIF includes a lot of countries, which diversifies risk and reduces premiums. It also has clear payment triggers, which means that it dispenses cash immediately after the hurricanes and storms that dog the region.*

**Insurance in Asia. *The Economist*. June 2015**

## CONFERENCES AND MEETINGS



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.

A major focus this year was on CCRIF's participation at COP 21 – the 21<sup>st</sup> Conference of Parties of the United Nations Framework Convention on Climate Change held in Paris during November-December 2015. CCRIF participated at the following fora during COP 21:

- Wider Caribbean Pavilion, hosted by CCCCC, delivering presentation “The Role of Risk Transfer in Climate Adaptation - The CCRIF Example”
- GIZ – MCII Side Event, Effective post-2015 climate risk management: The role of national adaptation planning and climate risk insurance
- Session on “Rapid Action on Insurance and Climate Resilience” hosted by InsuResilience – the G7 Initiative on Climate Risk Insurance
- Session on Understanding and Addressing the Urgency on Resilience, speaking on “Assessing how Caribbean Countries are currently undertaking country-driven strategies to cope with climate change and their specific needs – the case of CCRIF”





Discussions at other fora focused on the expansion of CCRIF to include Central American countries as well as to promote the idea of CCRIF expansion to other regions of the world. The range of events attended by the CCRIF Board, CEO and Team and the topics presented is shown in the table below.



*At the Meeting of UN Secretary General with Caribbean Climate Agencies in July 2015*

*UN Secretary General, Mr. Ban Ki-Moon (Left) and CDB President Dr. Wm Warren Smith*

*CCRIF CEO, Mr. Isaac Anthony (Left) and CDB President Dr. Wm Warren Smith*

*L-R: Dr. Ulric Trotz – Deputy Director CCCCC, Mr. Isaac Anthony and Dr. David Farrell – Director CIMH*

<b>Date / Location</b>	<b>Event</b>	<b>CCRIF Presentation / Topic</b>
<b>June 2015 Geneva, Switzerland</b>	Insurance Development Forum hosted by the World Bank	About CCRIF
<b>June 2015 Bonn, Germany</b>	United Nations Climate Change Secretariat Annual In-session Workshop on Long-term Climate Finance Session 1: Scaling up finance to foster adaptation actions in developing countries	The role of collaborative arrangements for managing climate risks: A Case of Study of CCRIF
<b>July 2015 Tarrytown, New York, USA</b>	Retreat on Climate Finance hosted by Executive Office of the Secretary-General	Expanding the Availability of Risk Insurance - The CCRIF Example
<b>July 2015 Barbados</b>	Meeting with the United Nations Secretary General and other Caribbean agencies	Briefing on CCRIF
<b>August 2015 Cairo, Egypt</b>	SIDS, LDC and Africa Experts Meeting on Climate Resilience	Sovereign Risk Pooling - The CCRIF Example

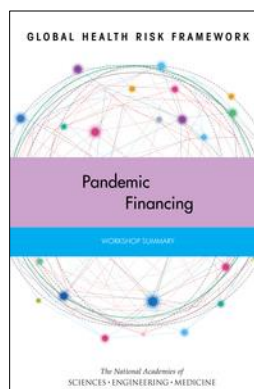


Date / Location	Event	CCRIF Presentation / Topic
<b>September 2015 Manila, Philippines</b>	ADB-OECD Forum on Disaster Risk Financing for Inclusive Development	Multi-country Catastrophe Risk Pooling The Experience of CCRIF SPC
<b>September 2015 Kuala Lumpur, Malaysia</b>	Global Seminar on Disaster Risk Financing: Towards the Development of Effective Approaches to the Financial Management of Disaster Risks - hosted by OECD	Multi-country Catastrophe Risk Pooling
<b>September 2015 Antigua and Barbuda</b>	2 <sup>nd</sup> Meeting of the OECS Ministers of the Environment	About CCRIF
<b>September 2015 New York, USA</b>	UN Pacific and SIDS Climate Resilience Meeting	CCRIF - A viable and permanent risk transfer mechanism for the Pacific region?
<b>October 2015 Barbados</b>	IDB Regional Policy Dialogue: Status of Incorporation of Disaster Risk Management and Climate Change Adaptation in National Public Investment Systems in the Caribbean	Catastrophe Risk Financing: The CCRIF Case Study
<b>October 2015 New York, USA</b>	Second Committee Special Event: "A crisis mitigation and resilience building mechanism for LDCs, LLDCs and SIDS" Hosted by UN-OHRLSS	The Experience of CCRIF SPC
<b>October 2015 Washington DC, USA</b>	Secretary's Climate & Clean Energy Investment Forum hosted by the US State Department	The Role of Insurance in Mitigating Climate Risks - The Experience of CCRIF SPC
<b>November 2015 Barbados</b>	Barbados Emergency Management Advisory Council Meeting	Understanding CCRIF SPC and its Benefits to Barbados
<b>November 2015 Beijing, China</b>	The Beijing Consultative Meeting on South-South Cooperation on Climate Change - organized by Executive Office of the Secretary General of the UN, supported by UNEP-IEMP	Activities and opportunities to promote South-South cooperation on resilience
<b>November 2015 Casablanca, Morocco</b>	11 <sup>th</sup> International Microinsurance Conference	Understanding CCRIF SPC and the Facility's Role in Fulfilling G7 Country Mandate
<b>December 2015 Paris, France</b>	Events at COP 21:  GIZ – MCII Side Event, Effective post-2015 climate risk management: The role of national adaptation planning and climate risk insurance  Session on Understanding and Addressing the Urgency on Resilience	Update on CCRIF  Assessing how Caribbean Countries are currently undertaking country-driven strategies to cope with climate change and their specific needs – the case of CCRIF

Date / Location	Event	CCRIF Presentation / Topic
	Session on “Rapid Action on Insurance and Climate Resilience” hosted by InsuResilience – the G7 Initiative on Climate Risk Insurance  Wider Caribbean Pavilion, hosted by CCCCC	CCRIF’s role in climate resilience  The Role of Risk Transfer in Climate Adaptation - The CCRIF Example
<b>January 2016</b> <b>Kingston, Jamaica</b>	UWI School of Graduate Studies Session for scholarship recipients	CCRIF Scholarship Programmes
<b>March 2016</b> <b>Aruba</b>	UN-OHRLLS Conference on Public-Private Partnerships	CCRIF SPC – A Successful PPP model for Catastrophe Risk Financing
<b>April 2016</b> <b>Brussels, Belgium</b>	United Nations Development Cooperation Forum: Belgium High-Level Symposium “Rethinking development cooperation for the SDGs: Country-level perspectives and lessons”	Rethinking development cooperation for the SDGs: country-level perspectives and lessons”

## INITIATIVE ON PANDEMIC INSURANCE

Since the 2014 Ebola outbreak, many public- and private-sector leaders have experienced a need for improved management of global public health emergencies. Risk insurance is increasingly being seen as a viable financing mechanism. Consequently, CCRIF was asked to be on the Planning Committee during May - August 2015 for the organization of the Global Health Risk Framework Project on Pandemic Financing being spearheaded by the National Academy of Sciences (NAS) in collaboration with the World Bank and the World Health Organization (WHO).



on the financing of a global response to pandemic threats, clarifying where the money for surveillance, detection and response should come from and how it should be spent. Also it examined the role of the World Bank's proposed Pandemic Emergency Financing Facility, an organization that will coordinate international financial response to pandemics. CCRIF was selected to be part of a core group to summarize the workshop findings and recommendations for the commissioners as well as to put forward key ideas and suggestions not discussed at the workshop.

CCRIF participated also in the Workshop on Pandemic Financing held in Washington DC on 27-28 August. The workshop focused

*For rapid disbursement of funding, new models based on parametric pandemic insurance could fill the need for early financing of pandemics. Countries could insure themselves against pandemic risk in much the same way as they insure themselves against ... natural disasters. ... CCRIF is a multi-country parametric sovereign risk insurance programme that has successfully covered the post-disaster liquidity gap faced by governments in the region. Governments receive monies quickly when a hurricane or other natural disaster strikes and the amount is calculated objectively. Over time as we learn more about the risks, as better data become available, as the global architecture for pandemic triggers becomes more transparent, and as the market for reinsurance and other insurance linked securities grows, the premiums would fall. This would make parametric insurance an even more cost-effective way for early pandemic financing, allowing even the poorest countries to self-finance their insurance policies.*

**Responding to pandemics: new ways of raising finance and fast, *Financial Times* blog, May 19, 2016**

# MEMBERSHIP SUPPORT AND EXPANSION

## SUPPORT TO CURRENT MEMBERS

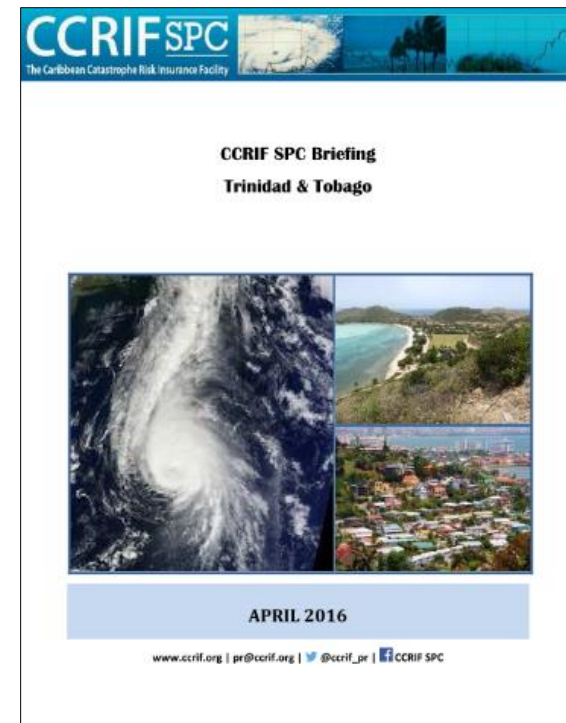
Last year, CCRIF's 16 Caribbean members were joined by Nicaragua, the first member from Central America. Nicaragua and other future Central American members are partnering with CCRIF through the Central America segregated portfolio (SP). The SPs for Caribbean and Central American members are legally separated pools of risk allowing for separation of risk management operations for Central American and Caribbean CCRIF countries (e.g. pricing, policy format) but a bundled access to the reinsurance market.

## Policy Renewal Discussions

Each year, CCRIF commences the renewals process with discussions with members regarding the details and types of coverage they wish to purchase for the next policy year that begins on 1 June, including new products on offer. During March and April 2016, CCRIF communicated with all current members and a CCRIF team led by the CEO conducted in-country or teleconference meetings with representatives of ministries of finance and disaster management and meteorology agencies in Caribbean member countries. In May, a team comprising CCRIF and the World Bank had two teleconference meetings regarding renewals with officials in CCRIF's sole Central American member - Nicaragua. These meetings also serve as a means of building capacity in catastrophe risk insurance and the products that CCRIF provides.

The policy renewal meetings included clarification of CCRIF products and policy elements, discussion of new developments within the facility and examination of details of coverage levels, policy options

and discounts on offer for the new policy year. The meetings also provided a forum to address any other issues raised by member countries. Country-specific briefing documents and presentations were created for each meeting.



## POLICY DISCUSSIONS IN CENTRAL AMERICA

**Peak Wind Speeds for CA Region**

- Comparative map between KAC/MPRES CA and CCRIF MPRES for peak wind speeds with 100-year return periods.
- All historic events are simulated and wind hazard values are computed for each 30-arc-second grid cell, the maximum value in each cell for each event year is selected, and hazard curves are fitted to the yearly maxima in each cell.

**PGA for the CA Region**

- The peak ground acceleration (PGA) expected to be exceeded once every 475 years for the region.
- To create this probabilistic ground shaking hazard map, the region is divided into 30 arc-second (~1km) grid cells. Hazard exceedance probability curves of PGA are fitted from the results of thousands of individual stochastic earthquake events for each grid cell.

**XSR 2.0 Model Database**

CCRIF has created a database of **historical rainfall events** that occurred in the Caribbean and Central America from 1998 to 2015 and the **resulting economic losses**.

Number of events by event type. The tropical cyclone severity scale includes TD (Tropical Depression), TS (Tropical Storm), and HU (Hurricane) categories from 1 to 5 in the Saffir-Simpson hurricane wind scale.

In May 2016, a team comprising CCRIF and the World Bank met with technical officials of ministries of finance and other related government agencies to discuss how countries can reduce their vulnerability to natural hazards and the role CCRIF catastrophe insurance coverage can play in reducing this vulnerability. COSEFIN countries can purchase TC, EQ and XSR coverage. Meetings were held with the governments of Costa Rica, El Salvador, Honduras, Guatemala and Panama between 3 and 6 May.

For each country, CCRIF developed country hazard risk profiles which describes the country’s vulnerability to tropical cyclones and earthquakes, as well as rainfall risk profiles. These underpin all CCRIF policies.

For each meeting, CCRIF created a country-specific presentation and the following issues were discussed:

- CCRIF and the products available for Central America
- Risk transfer mechanisms as a tool in disaster risk financing and climate change adaptation
- Elements of CCRIF policies
- The country’s risk profiles for tropical cyclones, earthquakes and rainfall
- Coverage levels and policy options for policy year 2016/2017
- Latest developments in CCRIF

All countries indicated interest in joining CCRIF. Details regarding policies and timing will be further discussed and decisions made in the next fiscal year.



## FINANCIAL SUPPORT FOR COSEFIN MEMBER COUNTRIES TO JOIN CCRIF

As described under **Strategic Objective 3** above, in April 2016, the European Commission provided €14 million to the Multi-Donor Trust Fund to facilitate COSEFIN countries becoming members of CCRIF. This contribution is an acknowledgement that donors will play a critical role in enabling Central American states to join CCRIF and expanding the new coverage option for excess rainfall for COSEFIN states. Donors are supporting the capitalization of the Central

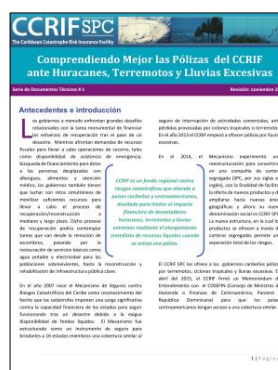
America segregated portfolio in a similar fashion as when the MDTF established at CCRIF's inception supported the Caribbean members. As was the case then, the capital placed in a multi-donor trust fund will be used by CCRIF to make payouts and cover reinsurance costs until the trust fund is exhausted. In parallel, country premium payments will go to build the capital of the segregated cell, so that it is fully self-sustaining once the trust fund is finished.

## COMMUNICATION WITH COSEFIN COUNTRIES

To further support our current and future Central American members, CCRIF began the process of converting its website to accommodate multi-language support and made the following key documents available in Spanish:

- Understanding CCRIF - A Collection of Questions and Answers - Revised February 2016 – *Comprendiendo al CCRIF - Compendio de Preguntas y Respuestas - Revisión febrero del 2016*

- Technical Paper - Understanding CCRIF's Hurricane, Earthquake and Excess Rainfall Policies – *Comprendiendo Mejor las Pólizas del CCRIF ante Huracanes, Terremotos y Lluvias Excesivas*
- The CCRIF Excess Rainfall Model – *El modelo de Exceso de Lluvia (XSR) del CCRIF*
- Hazard event briefings for Nicaragua



## PARTNERSHIPS AND STRATEGIC ALLIANCES



CCRIF continues to develop and strength partnerships with key entities in the region through the development and implementation 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
- Organisation of Eastern Caribbean States – OECS
- United Nations Economic Commission for Latin America and the Caribbean – UNECLAC
- University of the West Indies – UWI

### CARIBBEAN COMMUNITY CLIMATE CHANGE CENTRE

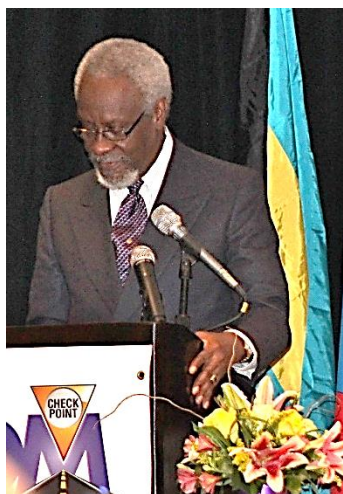
CCCCC coordinates the Caribbean Community's (CARICOM's) response to climate change, working on effective solutions, projects and programmes to combat the environmental, social and economic impacts of climate variability, climate change and extreme weather events and is guided by the Regional Strategic Framework – Achieving Development Resilient to Climate Change (2009 – 2015) approved by the CARICOM Heads of Government in 2009.

CCRIF will support CCCCC in the revision of the Regional Strategic Framework to ensure that it remains relevant to the realities of the

region and to respond appropriately to the Paris Agreement from COP 21, assisting countries to realise the Sustainable Development Goals (SDGs) and better prepare for varying climate regimes, given current climate change projects.

The expected output is a revised Regional Strategic Framework for the CARICOM Region that covers the period 2016 - 2026 which can be presented to Heads of Government for their approval.

## CARIBBEAN DISASTER EMERGENCY MANAGEMENT AGENCY



CCRIF was a major sponsor for the 9<sup>th</sup> Caribbean Conference on Comprehensive Disaster Management, hosted by CDEMA in collaboration with the Bahamas National Emergency Management Agency in December 2015. Convened under the theme “The Road to Resilience: Check Point 2015”, this forum utilized a checkpoint approach to monitoring the region’s progress to date on the implementation of the CDM Strategy 2014 to 2024.

CCRIF provided sponsorship of US\$25,000, which was used towards supporting the Opening Ceremony and the High Level Session on Investing in Disaster Risk Management.

During the Opening Ceremony, keynote speaker the Most Honourable Percival Noel James Patterson – former Prime Minister of Jamaica – spoke about sustainable development as the pathway to integrated agenda for resilience. He said greater collaboration was required among all regional institutions with mandates to address

climate change and disaster risks – and that this cooperation should be based on making data readily available to provide greater clarity in the understanding of these developmental issues, which will drive national level decisions and policies inclusive of appropriate allocation of funding.

Sponsored by CCRIF and the Caribbean Development Bank, the High Level Session examined DRM investment emerging from hazard impacts/experiences and provided recommendations on strengthening DRM sector mainstreaming as an input to sustainable development.

CCRIF's participation also included:

- Delivering a presentation, entitled "The Livelihood Microinsurance Policy: Contributing to Building Resilience in the Region" in a session on New Knowledge and Livelihoods for Resilience
- Acting as a respondent within the Community Resilience Session to speak about the CCRIF Small Grants Programme
- Hosting a booth in the conference exhibit

CCRIF has supported this conference since 2009 as part of its MOU with CDEMA.

Also within the CCRIF-CDEMA MOU work plan, CDEMA continued to administer the CDM Audit Tool to countries in the region. This tool assesses country preparedness for natural hazards and will be used in the development of CDEMA disaster readiness accreditation standards. Once these standards are developed, the feasibility of CCRIF premium discounts for CCRIF member countries with CDEMA accredited disaster readiness will be explored.

### **Finance and Economic Development Sector Sub-Committee**

CCRIF is a member of the Finance and Economic Development Sector Sub-Committee (FEDSSC) of the CDM Coordination and Harmonization Council of CDEMA. Chaired by the Caribbean Development Bank, the other members of this sub-committee are: Caribbean Association of Banks, Insurance Association of the Caribbean, Eastern Caribbean Central Bank, Inter-American Development Bank, World Bank, Caribbean Micro Finance Alliance, Caribbean Regional Technical Assistant Programme and CDEMA.

CCRIF continued to support CDEMA's initiative to develop country risk profiles at scales appropriate for development planning purposes, which is being guided by a Regional Technical Working Group (RTWG). CCRIF participated in the 2<sup>nd</sup> RTWG meeting held in February 2016 and made a presentation on CCRIF and its country (and rainfall) risk profiles in a session aimed at informing the group about current risk assessment initiatives taking place in the Region. The aim was help the Group to identify local data needs and gaps in order to conduct risk assessments that would be useful for local planning. CDEMA is working with regional partner organizations to access funds for full implementation of this initiative.





## CARIBBEAN INSTITUTE FOR METEOROLOGY AND HYDROLOGY

CCRIF and CIMH finalized a new Memorandum of Understanding for the next six years. The main areas of collaboration are:

- Enhancement of measuring networks for extreme wind, rainfall, streamflow and drought events in support of CCRIF parametric insurance and financial derivative products in CCRIF member countries.
- Collection of hydro-meteorological data from all sources after major tropical cyclone or rainfall events within any of the CARICOM countries, and assistance to CCRIF and other agencies in comprehensive documentation of such events, from both a hydro-meteorological and impact/damage perspective.
- Development and expansion of data, tools and products for real-time storm forecasting and sharing of loss/damage estimates from hydro-meteorological events.
- Development of a cadre of climate science professionals throughout the region through collaboration with CIMH. This activity area may include professional development of CIMH

staff, support for courses operated by CIMH, or scholarships in climate science subjects.



A work plan that identifies specific activities in these areas to be implemented in next two years is being finalized.

## ORGANISATION OF EASTERN CARIBBEAN STATES COMMISSION



The OECS Commission conducted vulnerability assessments in three of the most vulnerable communities in Saint Lucia: Anse La Raye (village), Dennery (village) and Malgretoute / Vollet in Micoud. A vulnerability assessment validation workshop was held in June 2015 to obtain feedback on the assessments and input into the development of disaster risk reduction action plans for these communities. The final community vulnerability assessments also include these disaster risk reduction action plans.

A new work plan was developed for 2016-2018 and includes:

- Building capacity to implement community projects – conducting project proposal development and project

## UNITED NATIONS ECONOMIC COMMISSION FOR LATIN AMERICA AND THE CARIBBEAN

A new MOU between CCRIF and UNECLAC was signed in March 2016 – as a continuation of the work implemented under the first MOU – and a new work programme was developed to build on that work. The work programme for 2015-2017 was based on recommendations made and lessons learned from the two studies previously conducted: a review of ECLAC Damage and Loss Assessment (DaLA) in the Caribbean and an assessment of strategies for linking the DaLA Methodology to Post-Disaster Needs Assessment (PDNA).

The two main activities are:

- **ECLAC Disaster Assessment Methodology Training Courses.** Based on a recommendation from the studies, the ECLAC methodology for disaster assessment and the training materials were updated in 2014. ECLAC enhanced the evaluation of post disaster assessments including developing a module (not

management workshops for communities including the 3 pilot communities. The output of the workshops would be one or more project proposal documents for activities identified in their disaster risk management plans that will be submitted to the CCRIF Small Grants Programme (and potentially other donors).

- Developing early flood warning communications protocols for communities
- Replicating the vulnerability assessment study in another OECS country

included in the previous training manual) on estimating environmental losses associated with disasters. With the support of CCRIF, ECLAC will organize and deliver training on the new manual as well as the updated methodology with respect to environmental valuation to public officers of member states.

- **Development and Delivery of a Train-the-Trainer Programme to CDEMA.** A train-the trainer course on ECLAC's methodology will be delivered to key officers at CDEMA. In addition, ECLAC will work with CDEMA to standardize the forms used to gather information for both CDEMA's Damage Assessment and Needs Analysis (DANA) and/or ECLAC's disaster assessment methodology (DALA). These activities will help to strength a network in the region and to create interinstitutional teams for disaster assessments.

## UNIVERSITY OF THE WEST INDIES

The focus of the MOU with UWI is the administration of the CCRIF-UWI Scholarship Programme (*see Strategic Objective 3 above*). In addition, initial discussions have been held regarding offering courses

or modules on issues such as parametric insurance in the context of disaster risk management and climate change adaptation. These courses could be offered on campus as well as online.

## UNIVERSITY OF THE WEST INDIES SEISMIC RESEARCH CENTRE

The collaboration between CCRIF and the UWI Seismic Research Centre (SRC) is aimed at enhancing the capability for identifying and mitigating seismic risk in the Caribbean. Under an MOU that ended in May 2015, SRC installed or updated 15 strong motion sensors in Grenada, Barbados, Saint Lucia, Dominica, Antigua, St. Kitts, Nevis, St. Vincent and Jamaica. The two organizations began discussions on developing a new MOU to build on the previous work, which would address the following areas:

- Training to sensitize certain target groups (e.g. engineers, planners and key government functionaries) about the use of the strong motion data and other SRC products
- Extension of the strong motion project (installation of additional instruments)
- Production of revised earthquake hazard maps

## INSTITUTION OF STRUCTURAL ENGINEERS CARIBBEAN REGIONAL GROUP

CCRIF provided sponsorship worth US\$10,000 for the 8<sup>th</sup> Annual Conference of the Institution of Structural Engineers Caribbean Regional Group held in Barbados in September 2015. With the theme, “Tourism Structures”, it was attended by approximately 80 engineers, architects and other professionals involved in the built environment.

This is the fourth IStructE CRG conference sponsored by CCRIF.



Pic. 1 - Engineer Luigi DiSarno (Italy), Specialist in Base Isolation and Seismic Hazard Mitigation



Pic. 2 - Engineer Dr. John Roberts (U.K), Designer of the London Eye

**AUDITED FINANCIAL  
STATEMENTS**



CCRIF SPC

FINANCIAL STATEMENTS

FOR THE YEAR ENDED MAY 31, 2016

**CCRIF SPC**  
**FINANCIAL STATEMENTS**  
**FOR THE YEAR ENDED MAY 31, 2016**

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## INDEPENDENT AUDITOR'S REPORT

### To the Board of Directors of CCRIF SPC

We have audited the accompanying financial statements on pages 2 – 25 of the Core, EQ/TC SP, XSR SP, LPC SP and CA SP each as defined in Note 1 of the financial statements which comprise the balance sheets as at May 31, 2016, 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 each of the Core, EQ/TC SP, XSR SP, LPC SP and CA SP as at May 31, 2016, and each of their financial performance and each of their cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America.

A handwritten signature in black ink, appearing to read "PricewaterhouseCoopers", written in a cursive style.

September 16, 2016

*PricewaterhouseCoopers, 18 Forum Lane, Caman Bay, P.O. Box 258, Grand Cayman, KY1- 1104, Cayman Islands, T: +1 (345) 949 7000, F: +1 (345) 949 7352, [www.pwc.com/ky](http://www.pwc.com/ky)*

**CCRIF SPC**

**BALANCE SHEET**

**AT MAY 31, 2016**

(Expressed in United States dollars)

	<b>Core</b>	<b>EQ/TC SP</b>	<b>XSR SP</b>	<b>LPC SP</b>	<b>CA SP</b>
	\$	\$	\$	\$	\$
<b>ASSETS</b>					
Cash and cash equivalents (Note 4)	3,386,022	1,892,992	2,913,421	744,720	632,920
Investments, at fair value (Note 5)	54,679,207	42,608,698	18,400,234	4,289,493	-
Development costs (Note 16)	460,167	-	-	-	-
Accrued interest	376,427	403,349	177,557	33,962	-
Unrealized gains on forward contracts (Note 8)	20,953	73,492	19,685	6,213	-
Due from Donor Funds	-	-	-	-	260,650
Due from Core (Note 17)	-	13,420,008	-	-	193,640
Due from Segregated Portfolios (Note 17)	2,500	1,285,000	15,000	-	-
Premium Receivable	-	-	496,711	-	-
Prepaid expenses	16,031	-	-	-	-
Total assets	58,941,307	59,683,539	22,022,608	5,074,388	1,087,210

**LIABILITIES AND SHAREHOLDER'S EQUITY**

<b>Liabilities</b>					
Accounts payable and accrued expenses	223,392	92,114	23,992	6,293	4,241
Due to Core (Note 17)	-	-	2,500	-	-
Due to Segregated Portfolios (Note 17)	13,613,648	-	1,285,000	-	15,000
Participation fee deposits (Note 7)	-	13,232,508	-	-	1,000,000
Total liabilities	13,837,040	13,324,622	1,311,492	6,293	1,019,241

**Shareholder's equity**

Share capital (Note 9)	1,000	-	-	-	-
Non-voting redeemable preference shares (Note 9)	-	1	1	1	1
Share premium (Note 9)	119,000	42,499,999	24,999,999	4,999,999	-
Retained earnings / (accumulated deficit)	44,984,267	3,858,917	(4,288,884)	68,095	67,968
Total shareholder's equity	45,104,267	46,358,917	20,711,116	5,068,095	67,969
Total liabilities and shareholder's equity	58,941,307	59,683,539	22,022,608	5,074,388	1,087,210

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

Milo Pearson \_\_\_\_\_  
Director Date September 16, 2016

Desiree Cherebin \_\_\_\_\_  
Director Date September 16, 2016

The accompanying notes on pages 7-25 are an integral part of these financial statements.



CCRIF SPC

STATEMENT OF OPERATIONS

FOR THE YEAR ENDED MAY 31, 2016

(Expressed in United States dollars)

	Core	EQ/TC SP	XSR SP	LPC SP	CA SP
	\$	\$	\$	\$	\$
<b>Operating income</b>					
Income from parametric insurance contracts (Note 2)	-	24,325,646	6,816,085	-	1,000,000
Discounts awarded on parametric insurance contracts	-	(13,294,562)	(986,343)	-	-
Expenses on parametric reinsurance contracts (Note 2)	-	(9,121,276)	(4,100,000)	-	(521,300)
Net income on parametric contracts	-	1,909,808	1,729,742	-	478,700
Ceding commissions on parametric reinsurance contracts	-	267,771	-	-	-
Total operating income	-	2,177,579	1,729,742	-	478,700
<b>Operating expenses</b>					
Claims paid on parametric insurance contracts (Note 11)	-	-	2,402,153	-	-
Claims recovered on parametric insurance contracts (Note 11)	-	-	-	-	-
Brokerage, facility supervisor and risk management specialist fees	785,265	45,564	6,250	-	-
Total operating expenses	785,265	45,564	2,408,403	-	-
Net operating income / (loss)	(785,265)	2,132,015	(678,661)	-	478,700
<b>Other income and expenses</b>					
Net investment income (Note 12)	756,723	434,195	178,979	31,254	104
Income from Donor Funds (Note 6)	9,239	-	-	-	581,300
Amortisation of development costs (Note 16)	(83,166)	-	-	-	-
Technical assistance expenses	(659,921)	-	-	-	-
Central American Initiative (Note 10)	227,010	-	-	-	(227,010)
Segregated portfolio rental fees	2,575,000	(1,500,000)	(400,000)	-	(675,000)
Administrative expenses (Note 14)	(1,336,132)	(44,568)	(235,129)	3,494	(90,126)
<b>Net income / (loss) for the year</b>	703,488	1,021,642	(1,134,811)	34,748	67,968

The accompanying notes on pages 7-25 are an integral part of these financial statements.

**CCRIF SPC**

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

(Expressed in United States dollars)

**Core**

	<u>Share Capital</u>	<u>Non-voting redeemable preference shares</u>	<u>Share premium</u>	<u>Retained earnings</u>	<u>Total</u>
Balance at May 31, 2015	\$ 1,000	\$ -	\$ 119,000	\$ 44,280,779	\$ 44,400,779
Net income for the year	-	-	-	703,488	703,488
Balance at May 31, 2016	<u>\$ 1,000</u>	<u>\$ -</u>	<u>\$ 119,000</u>	<u>\$ 44,984,267</u>	<u>\$ 45,104,267</u>

**EQ/IC SP**

	<u>Share Capital</u>	<u>Non-voting redeemable preference shares</u>	<u>Share premium</u>	<u>Retained earnings</u>	<u>Total</u>
Balance at May 31, 2015	\$ -	1	\$ 42,499,999	\$ 2,837,275	\$ 45,337,275
Net income for the year	-	-	-	1,021,642	1,021,642
Balance at May 31, 2016	<u>\$ -</u>	<u>1</u>	<u>\$ 42,499,999</u>	<u>\$ 3,858,917</u>	<u>\$ 46,358,917</u>

**XSR SP**

	<u>Share Capital</u>	<u>Non-voting redeemable preference shares</u>	<u>Share premium</u>	<u>Accumulated deficit</u>	<u>Total</u>
Balance at May 31, 2015	\$ -	1	\$ 24,999,999	\$( 3,154,073)	\$ 21,845,927
Net loss for the year	-	-	-	( 1,134,811)	( 1,134,811)
Balance at May 31, 2016	<u>\$ -</u>	<u>1</u>	<u>\$ 24,999,999</u>	<u>\$( 4,288,884)</u>	<u>\$ 20,711,116</u>

**LPC SP**

	<u>Share Capital</u>	<u>Non-voting redeemable preference shares</u>	<u>Share premium</u>	<u>Retained earnings</u>	<u>Total</u>
Balance at May 31, 2015	\$ -	1	\$ 4,999,999	\$ 33,347	\$ 5,033,347
Net income for the year	-	-	-	34,748	34,748
Balance at May 31, 2016	<u>\$ -</u>	<u>1</u>	<u>\$ 4,999,999</u>	<u>\$ 68,095</u>	<u>\$ 5,068,095</u>

The accompanying notes on pages 7-25 are an integral part of these financial statements.

CCRIF SPC

STATEMENT OF CHANGES IN SHAREHOLDER'S EQUITY

(Expressed in United States dollars)

CA SP

	<u>Share Capital</u>	<u>Non-voting redeemable preference shares</u>	<u>Share premium</u>	<u>Retained earnings</u>	<u>Total</u>
Balance at May 31, 2015	\$ -	\$ -	\$ -	\$ -	-
Preference shares issued	-	1	-	-	1
Net income for the year	-	-	-	67,968	67,968
Balance at May 31, 2016	<u>\$ -</u>	<u>\$ 1</u>	<u>\$ -</u>	<u>\$ 67,968</u>	<u>\$ 67,969</u>

The accompanying notes on pages 7-25 are an integral part of these financial statements.

**CCRIF SPC**

**STATEMENT OF CASH FLOWS**

**FOR THE YEAR ENDED MAY 31, 2016**

(Expressed in United States dollars)

	Core	EQ/TC SP	XSR SP	LPC SP	CA SP
	\$	\$	\$	\$	\$
<b>Operating activities</b>					
Net income/ (loss) for the year	703,488	1,021,642	(1,134,811)	34,748	67,968
Adjustments to reconcile net income/(loss) to net cash from operating activities:					
Adjustment for items not affecting cash:					
Change in fair value of investments	279,088	171,509	109,907	303	-
Net realized losses on investments	486,100	620,050	296,210	99,123	-
Change in unrealized gain on derivatives	(225,383)	(396,587)	(159,803)	(49,135)	-
Amortisation of development cost	83,166	-	-	-	-
Trading Securities:					
Purchase of securities	(19,439,929)	(17,944,798)	(6,331,115)	(1,327,492)	-
Proceeds from sale of securities	16,715,071	11,434,935	5,576,279	1,635,232	-
Changes in assets and liabilities:					
Due from Core	-	321,759	127,574	-	(193,640)
Due from Segregated portfolios	11,440	(1,285,000)	2,531,538	-	-
Accrued interest	(13,034)	17,914	19,085	15,137	-
Amounts due from Donor Funds	-	-	-	-	(260,650)
Premium receivable	-	-	(496,711)	-	-
Prepaid expenses	74,593	-	-	-	-
Accounts payable and accrued expenses	(169,727)	43,506	(44,980)	(4,647)	4,241
Income from parametric contracts received in advance	-	(1,425,000)	(106,250)	-	-
Due to Core	-	-	2,500	(13,940)	-
Due to Segregated Portfolios	(255,693)	(2,546,538)	1,285,000	-	15,000
Net cash provided by / (used in) operating activities	(1,750,820)	(9,966,608)	1,674,423	389,329	(367,081)
<b>Investing activities</b>					
Development costs	(155,000)	-	-	-	-
Net cash used in investing activities	(155,000)	-	-	-	-
<b>Financing activities</b>					
Participation fee deposits*	-	(187,500)	-	-	1,000,000
Share capital received	-	-	-	-	1
<b>Net change in cash and cash equivalents</b>	(1,905,820)	(10,154,108)	1,674,423	389,329	632,920
<b>Cash and cash equivalents at the beginning of year</b>	5,291,842	12,047,100	1,238,998	355,391	-
<b>Cash and cash equivalents at the end of year</b>	3,386,022	1,892,992	2,913,421	744,720	632,920
Interest and dividends received	1,675,956	1,422,510	692,909	155,069	104

\*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 7). Non cash transactions between the Core and SP's are disclosed in Note 17.

The accompanying notes on pages 7-25 are an integral part of these financial statements.



## CCRIF SPC

### FINANCIAL STATEMENTS

#### FOR THE YEAR ENDED MAY 31, 2016

(Expressed in United States dollars)

#### **1. 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 trustee (the "Trustee") of the CCRIF Star Trust (the "Trust"). The non-voting redeemable preference shares of each segregated portfolio (Note 9) 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 and Central American countries ("Participating Countries").

As of May 31, 2016, the Company comprises the general assets (the "Core"), which undertakes no underwriting activities, and four 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.
- Central America SP ("CA SP") - provides earthquake and tropical cyclone coverage to Central American governments

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.

#### **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.

## CCRIF SPC

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#### **2. Parametric contracts (continued)**

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, 2016:

- EQ/TC SP retains all losses up to \$30 million.
- 100% of the next \$138 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 \$168 million. The modelled probability of a loss reaching this layer has been indicated to be a 1-in-1,000 year loss event.

For the 2015/16 policy year (which terminated on May 31, 2016), the combined aggregate coverage limits for all Participating Countries in the EQ/TC SP were \$294 million for tropical cyclone events and \$147 million for earthquake events, respectively.

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, 2016:

- XSR SP retains all losses up to \$7 million.
- 100% of the next \$35 million of losses are reinsured with a quality reinsurer with an A.M. Best rating of A+.
- XSR SP retains all subsequent losses above \$42 million. The modelled probability of a loss reaching this layer has been indicated to be a 1-in-5,000 year loss event.

For the 2015/16 policy year (which terminated on May 31, 2016), the combined aggregate coverage limits for all Participating Countries in the XSR SP were \$55 million.

CA SP has ceded layers of this exposure to a commercial reinsurers. The following is a summary of the coverage in the program for the period up to May 31, 2016:

- CA SP retains all losses up to \$1.5 million.
- 100% of the next \$16 million of losses are reinsured with a quality reinsurer with an A.M. Best rating of A+.
- CA SP retains all subsequent losses above \$17.5 million. The modelled probability of a loss reaching this layer has been indicated to be a 1-in-80 year loss event.

For the 2015/16 policy year (which terminated on May 31, 2016), the combined aggregate coverage limits for all Participating Countries in the CA SP were \$8 million for tropical cyclone events and \$10 million for earthquake events, respectively.

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, 2016, 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:

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

**Management estimates and assumptions:** 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.

**Cash and cash equivalents:** 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 and government 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.

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).

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### FINANCIAL STATEMENTS

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

**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).

**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.

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

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 be 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 are contractually reimbursable.

**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, 2016, 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. The net realized gains on the parametric contracts are comprised of the following line items within the Statement of Operations: Income from parametric insurance contracts, Discounts awarded on parametric insurance contracts and Claims paid on parametric insurance contracts, and are \$11,031,084 in EQ/TC SP, \$3,427,589 in XSR SP and \$1,000,000 in CA SP for the year ended May 31, 2016.

**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 7); and/or
- they are required to fund losses (see Note 7)

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.

**Uncertain income tax positions:** 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.



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

**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, 2016, no receivables were determined to be past due or impaired and, accordingly, no provision for doubtful collection has been established.

**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.

**Segregated Portfolios:** 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 Core 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 and Butterfield Bank were engaged to provide asset management services under the terms of the related investment management agreements.

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**5. Investments (continued)**

The following tables summarize the investments that are measured at fair value at May 31, 2016:

<b><u>Core</u></b>	<b>Fair Value Measurements Determined Using:</b>			<b>Total</b>
	<b>Level 1 inputs</b>	<b>Level 2 inputs</b>	<b>Level 3 inputs</b>	
<b>At May 31, 2016:</b>				
Non-exchange traded mutual funds	\$ -	\$ 2,988,715	\$ -	\$ 2,988,715
Exchange traded options	32,656			32,656
Exchange-traded funds	1,284,777	-	-	1,284,777
Equity investments				
- Communications	426,490	-	-	426,490
- Consumer, Cyclical	145,419	-	-	145,419
- Consumer, Non-cyclical	1,279,224	-	-	1,279,224
- Technology	277,660	-	-	277,660
Corporate debt securities	-	46,449,255	-	46,449,255
Government sponsored debt securities	-	<u>1,795,011</u>	-	<u>1,795,011</u>
	<u>\$ 3,446,226</u>	<u>\$ 51,232,981</u>	<u>\$ -</u>	<u>\$ 54,679,207</u>

**EQ/TC SP**

<b>At May 31, 2016:</b>	<b>Fair Value Measurements Determined Using:</b>			<b>Total</b>
	<b>Level 1 inputs</b>	<b>Level 2 inputs</b>	<b>Level 3 inputs</b>	
Equity investments				
- Communications	\$ 778,096	\$ -	\$ -	\$ 778,096
- Consumer, Cyclical	265,340	-	-	265,340
- Consumer, Non-cyclical	2,334,093	-	-	2,334,093
- Technology	506,500	-	-	506,500
Exchange traded options	58,782	-	-	58,782
Corporate debt securities	-	35,195,331	-	35,195,331
Government sponsored debt securities	-	<u>3,470,556</u>	-	<u>3,470,556</u>
	<u>\$ 3,942,811</u>	<u>\$ 38,665,887</u>	<u>\$ -</u>	<u>\$ 42,608,698</u>

**XSR SP**

<b>At May 31, 2016</b>	<b>Fair Value Measurements Determined Using:</b>			<b>Total</b>
	<b>Level 1 inputs</b>	<b>Level 2 inputs</b>	<b>Level 3 inputs</b>	
Equity investments				
- Communications	\$ 338,475	\$ -	\$ -	\$ 338,475
- Consumer, Cyclical	115,457	-	-	115,457
- Consumer, Non-cyclical	1,015,246	-	-	1,015,246
- Technology	220,304	-	-	220,304
Exchange-traded options	25,094	-	-	25,094
Corporate debt securities	-	15,157,483	-	15,157,483
Government sponsored debt securities	-	<u>1,528,175</u>	-	<u>1,528,175</u>
	<u>\$ 1,714,576</u>	<u>\$ 16,685,658</u>	<u>\$ -</u>	<u>\$ 18,400,234</u>

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**5. Investments (continued)**

**LPC SP**

**At May 31, 2016:**

	Level 1 inputs	Level 2 inputs	Level 3 inputs	Total
Equity investments				
- Communications	\$ 81,397	\$ -	\$ -	\$ 81,397
- Consumer, Cyclical	27,767	-	-	27,767
- Consumer, Non-cyclical	244,275	-	-	244,275
- Technology	53,028	-	-	53,028
Exchange-traded options				
Corporate debt securities	-	3,534,234	-	3,534,234
Government sponsored debt securities	-	342,948	-	342,948
	<u>\$ 412,311</u>	<u>\$ 3,877,182</u>	<u>\$ -</u>	<u>\$ 4,289,493</u>

The cost of investments for Core, EQ/TC, XSR and LPC at May 31, 2016 are \$ 54,961,685, \$ 43,313,510, \$ 18,763,444 and \$4,377,715 respectively.

At May 31, 2016, the Core holds positions in two non-exchange traded open ended mutual funds, both incorporated in Ireland. The objective of both of these funds is to seek to maximise total return consistent with preservation of capital and prudent investment management. Management considers these funds to be relatively liquid as the funds process subscriptions and redemptions on a daily basis, subject to their respective terms and conditions. Under certain circumstances, the administrator of the funds 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 these mutual funds.

	<b>Core</b>	<b>EQ/TC SP</b>	<b>XSR SP</b>	<b>LPC SP</b>
Percentage of debt securities issued by US counterparties	39%	31%	29%	52%
Percentage of debt securities issued by UK counterparties	15%	28%	25%	15%
Percentage of debt securities issued by counterparties based other countries	46%	41%	46%	33%
	<b>Core</b>	<b>EQ/TC SP</b>	<b>XSR SP</b>	<b>LPC SP</b>
Percentage of debt securities graded as A- or higher	42%	36%	33%	41%
Percentage of debt securities graded as higher than BBB- but lower than A-	48%	49%	53%	53%
Percentage of non-investment graded debt securities below BBB- or not rated	10%	15%	14%	6%

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#### 5. Investments (continued)

The average maturity of fixed income securities as at May 31, 2016 is disclosed in the table below:

Core	EQ/TC SP	XSR SP	LPC SP
Average maturity	5.35years	5.86years	6.06years
		3.13years	

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 8). The margin call accounts are restricted cash balances required to be posted with respect to the futures contracts (see Note 3 and 8). The margin call accounts have balances of \$310,360 in the Core, \$659,219 in EQ/TC SP, \$238,086 in XSR SP and \$63,161 in LPC SP at May 31, 2016.

#### 6. Donor Funds

*Core:*

The Munich Climate Insurance Initiative (“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.

*CA SP:*

Effective October 14, 2015, an agreement was entered into between the International Bank for Reconstruction and Development/International Development Association (World Bank) acting as administrator of the Central America and Caribbean Catastrophe Risk Insurance Program Multi-Donor Trust Fund, and CA SP on behalf of CCRIF SPC (the “Recipient”) as per CCRIF TF Grant No TF0A0564. The grant is for US\$19.5 million to CCRIF SPC for a Central America and Caribbean Catastrophe Risk Insurance Project. The Donor Funds will finance Parametric Earthquake Risk Insurance and Parametric Climate Risk Insurance for CA SP Participating Countries.

During the year ended May 31, 2016, \$9,239 donor fund income relating to MCII Costs and \$581,300 relating to the World Bank project were recorded in the statement of operations in the Core and CA SP respectively.

#### 7. 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, 2016, 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.

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**7. 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, 2016, one Participating Countries elected to use a proportion of participation fee deposits held by EQ/TC SP to partially settle its premium (refer to Statements of Cash Flow for amount).

**8. 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 12).

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, 2016 (see Note 12).

**Core**

	<b>Gross realized gains</b>	<b>Gross realized loss</b>	<b>Net realized loss</b>	<b>Change in unrealized gains</b>
Futures on fixed income securities	\$ 134,566	\$( 136,501)	\$( 1,935)	\$ 36,218
Foreign exchange contracts	<u>287,759</u>	<u>( 398,168)</u>	<u>( 110,409)</u>	<u>189,165</u>
Total	<u>\$ 422,325</u>	<u>\$( 534,669)</u>	<u>\$( 112,344)</u>	<u>\$ 225,383</u>

**EQ/TC SP**

	<b>Gross realized gains</b>	<b>Gross realized loss</b>	<b>Net realized loss</b>	<b>Change in unrealized gains</b>
Futures on fixed income securities	\$ 152,251	\$( 229,770)	\$( 77,519)	\$ 136,828
Foreign exchange contracts	<u>471,309</u>	<u>( 653,943)</u>	<u>( 182,634)</u>	<u>259,759</u>
Total	<u>\$ 623,560</u>	<u>\$( 883,713)</u>	<u>\$( 260,153)</u>	<u>\$ 396,587</u>

**XSR SP**

	<b>Gross realized gains</b>	<b>Gross realized loss</b>	<b>Net realized loss</b>	<b>Change in unrealized gains</b>
Futures on fixed income securities	\$ 81,167	\$( 106,006)	\$( 24,839)	\$ 4,695
Foreign exchange contracts	<u>205,790</u>	<u>( 277,353)</u>	<u>( 71,563)</u>	<u>155,108</u>
Total	<u>\$ 286,957</u>	<u>\$( 383,359)</u>	<u>\$( 96,402)</u>	<u>\$ 159,803</u>



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**8. Derivative instruments (continued)**

<u>LPC SP</u>	Gross realized gains	Gross realized loss	Net realized gains/(loss)	Change in unrealized gains
Futures on fixed income securities	\$ 9,265	\$( 4,736)	\$ 4,529	-
Foreign exchange contracts	<u>60,901</u>	<u>( 80,533)</u>	<u>( 19,632)</u>	<u>49,135</u>
Total	<u>\$ 70,166</u>	<u>\$( 85,269)</u>	<u>\$( 15,103)</u>	<u>\$ 49,135</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, 2016, 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, 2016 were:

Core	Futures: \$6,090,019	Options: \$ 6,293,124
EQ/TC SP	Futures: \$9,788,025	Options: \$10,073,808
XSR SP	Futures: \$4,374,675	Options: \$ 4,668,660
LPC SP	Futures: \$1,216,888	Options: \$ 675,000

The following outstanding foreign exchange contracts were held as at May 31, 2016:

<u>Core</u>	<u>Maturity date</u>	<u>Notional value</u>	<u>Fair Values</u>
United States Dollars future (bought US\$ sold €)	June 15, 2016	\$4,591,191 (at future rate of US\$1.11:€1)	\$ 45,262
United States Dollars future (bought US\$ sold £)	June 13, 2016	\$2,442,994 (at future rate of US\$1.4467:£)	( 29,997)
United States 10 year note futures	September 30, 2016	\$1,400,000	<u>5,688</u>
			<u>\$ 20,953</u>
<u>EQ/TC SP</u>	<u>Maturity date</u>	<u>Notional value</u>	<u>Fair Values</u>
United States Dollars future (bought US\$ sold €)	June 15, 2016	\$10,573,652 (at future rate of US\$1.11:€1)	\$ 112,220
United States Dollars future (bought US\$ sold £)	June 13, 2016	\$3,981,175 (at future rate of US\$1.4467:£1)	( 48,884)
United States 10 year note future	September 30, 2016	\$2,500,000	<u>10,156</u>
			<u>\$ 73,492</u>

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(Expressed in United States dollars)

**8. Derivative instruments (continued)**

<b><u>XSR SP</u></b>	<b><u>Maturity date</u></b>	<b><u>Notional value</u></b>	<b><u>Fair Values</u></b>
United States Dollars future (bought US\$ sold €)	June 15, 2016	\$3,617,302 (at future rate of US\$ 1.11: €1 )	\$ 37,397
United States Dollars future (bought US\$ sold £)	June 13, 2016	\$1,809,625 (at future rate of US\$ 1.4467: £1 )	( 22,220)
United States 10 year note future	September 30, 2016	\$1,100,000	<u>4,508</u>
			<u>\$ 19,685</u>

**LPC SP**

<b><u>Maturity date</u></b>	<b><u>Notional value</u></b>	<b><u>Fair Values</u></b>
United States Dollars future (bought US\$ sold €)	June 15, 2016 \$1,113,016 (at future rate of US\$1.11: € 1 )	\$ 12,879
United States Dollars future (bought US\$ sold £)	June 13, 2016 \$542,888 (at future rate of US\$1.4467: £1 )	( 6,666)
		<u>\$ 6,213</u>

**9. 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.

	<b><u>Core</u></b>	<b><u>EQ/TC SP</u></b>	<b><u>XSR SP</u></b>	<b><u>LPC SP</u></b>	<b><u>CA SP</u></b>
Share capital	\$ 1,000	\$ -	\$ -	\$ -	\$ -
Non-voting redeemable preference shares	-	1	1	1	1
Share premium	<u>119,000</u>	<u>42,499,999</u>	<u>24,999,999</u>	<u>4,999,999</u>	<u>-</u>
	<u>\$120,000</u>	<u>\$42,500,000</u>	<u>\$25,000,000</u>	<u>\$ 5,000,000</u>	<u>\$ 1</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.

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").

## CCRIF SPC

### FINANCIAL STATEMENTS

#### FOR THE YEAR ENDED MAY 31, 2016

(Expressed in United States dollars)

#### 9. Share capital and share premium (continued)

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.

#### 10. Central American Initiative

During the year ended May 31, 2016 expenditure was charged by the Core to CA SP relating to extension of the Tropical Cyclone and Earthquake programme towards the countries of Central America, represented by the Council of Finance Ministers of those countries (the "COSEFIN Countries").

#### 11. Claims paid

There was one event which triggered claim payment to Participating Country in the XSR SP. Total claim payment in the year ending May 31, 2016 was \$2,402,153. No amounts were recovered from reinsurers in respect of this claim.

#### 12. Net Investment Income

Net Investment income comprises:

	Core	EQ/TC SP	XSR SP	LPC SP	CA SP
Interest and dividend income	\$ 1,688,990	\$ 1,404,596	\$ 673,824	\$ 139,932	\$ 104
Change in fair value of investments	( 279,088)	( 171,509)	( 109,907)	( 303)	-
Net realized losses on sale of investments	( 486,100)	( 620,050)	( 296,210)	( 99,123)	-
Investment management, custody and fund administration fees	( 287,351)	( 325,706)	( 156,695)	( 42,770)	-
Foreign exchange gains / (losses)	7,233	10,430	4,566	(514)	-
Net realized losses on derivative instruments (Note 8)	( 112,344)	( 260,153)	( 96,402)	( 15,103)	-
Change in unrealized gains on derivative instruments (Note 8)	<u>225,383</u>	<u>396,587</u>	<u>159,803</u>	<u>49,135</u>	<u>-</u>
	<u>\$ 756,723</u>	<u>\$ 434,195</u>	<u>\$ 178,979</u>	<u>\$ 31,254</u>	<u>\$ 104</u>

#### 13. Related party transactions

During the year ended May 31, 2016, the Core incurred the Trustee and Enforcer fees of \$27,553 on behalf of the Trust.

During the year ended May 31, 2016, key management compensation consisted of salaries and expenses amounting to \$436,601 for three employees which are included within administration expenses.

**CCRIF SPC**

**FINANCIAL STATEMENTS**

**FOR THE YEAR ENDED MAY 31, 2016**

(Expressed in United States dollars)

**14. Administration expenses**

Administration expenses comprise:

	<b>Core</b>	<b>EQ/TC SP</b>	<b>XSR SP</b>	<b>LPC SP</b>	<b>CA SP</b>
Audit and other professional fees	\$ 81,793	\$ 42,750	\$ 213,000	\$ -	\$ 20,250
Captive management fees	134,000	-	15,000	(4,500)	34,000
Consultancy fees	39,137	-	-	-	-
Board and executive management remuneration	705,744	-	-	-	-
Directors' and Officers' insurance	23,719	-	-	-	-
Legal fees	8,945	-	-	-	15,744
Government fees	11,461	671	671	671	1,280
Meeting expenses	116,854	-	-	-	-
Publicity, conferences & workshops	114,577	-	5,000	-	-
Trust expenses (Note 13)	27,553	-	-	-	17,100
Munich Climate Initiative Project (Note 6)*	47,862	-	-	-	-
Sundry expenses and bank charges	<u>24,487</u>	<u>1,147</u>	<u>1,458</u>	<u>335</u>	<u>1,752</u>
	<u>\$ 1,336,132</u>	<u>\$ 44,568</u>	<u>\$ 235,129</u>	<u>\$ ( 3,494)</u>	<u>\$ 90,126</u>

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

**15. 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.

**16. Development costs**

	<b>Second</b>					
<b><u>Core</u></b>	<b><u>Second Generation</u></b>	<b><u>Excess Rainfall Model</u></b>	<b><u>Carib &amp; CA Drought Model</u></b>	<b><u>Carib &amp; CA XSR Model</u></b>	<b><u>Total</u></b>	
<b>Cost:</b>						
Balance carried forward at May 31, 2015	\$ 180,000	\$ 375,000	\$ -	\$ -	\$ -	\$ 934,755
Additions during the year	<u>-</u>	<u>55,000</u>	<u>50,000</u>	<u>50,000</u>	<u>50,000</u>	<u>155,000</u>
Balance carried forward at May 31, 2016	<u>\$ 180,000</u>	<u>\$ 430,000</u>	<u>\$ 50,000</u>	<u>\$ 50,000</u>	<u>\$ 50,000</u>	<u>\$ 1,089,755</u>

CCRIF SPC

FINANCIAL STATEMENTS

FOR THE YEAR ENDED MAY 31, 2016

(Expressed in United States dollars)

**16. Development costs (continued)**

	Second Generation Loss Model	Second Generation Upgrade	Excess Rainfall Model	Carib & CA Drought Model	Carib & CA XSR Model	<u>Total</u>
Balance carried forward at May 31, 2015	\$ 90,000	\$ 379,755	\$ 76,667	\$ -	\$ -	\$ 546,422
Amortisation charge for the year	<u>18,000</u>	<u>-</u>	<u>65,166</u>	<u>-</u>	<u>-</u>	<u>83,166</u>
Balance carried forward at May 31, 2016	<u>108,000</u>	<u>379,755</u>	<u>141,833</u>	<u>-</u>	<u>-</u>	<u>629,588</u>
Net book value at May 31, 2016	<u>\$ 72,000</u>	<u>\$ -</u>	<u>\$ 288,167</u>	<u>\$ 50,000</u>	<u>\$ 50,000</u>	<u>\$ 460,167</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.

**17. Due to / from Core and Due to / from Segregated Portfolios**

During the year ended May 31, 2016, the XSR SP bank account received premiums of \$1,285,000 which relate to premiums for insurance policies written by the EQ/TC SP. This amount was outstanding at May 31, 2016.

During the year ended May 31, 2016, the following transactions occurred between the Core and the Segregated Portfolios:

	EQ/TC SP	CA SP	EQ/TC SP	XSR SP
Participation fee deposit transferred by Core to EQ/TC SP	\$ 13,420,008	\$ -		
Expenses reimbursement through Core	<u>-</u>	<u>193,640</u>		
Total due from Core	<u>\$ 13,420,008</u>	<u>\$ 193,640</u>		
Expenses paid by XSR SP on behalf of CA SP			\$ -	\$ 15,000
Premium received by XSR SP on behalf of EQ/TC SP			1,285,000	-
Expenses paid by Core on behalf of SP	<u>2,500</u>	<u>-</u>	<u>-</u>	<u>-</u>
Total due from Segregated Portfolios	<u>\$ 2,500</u>	<u>\$ 1,285,000</u>	<u>\$ 1,285,000</u>	<u>\$ 15,000</u>



CCRIF SPC

FINANCIAL STATEMENTS

FOR THE YEAR ENDED MAY 31, 2016

(Expressed in United States dollars)

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

	<b>XSR SP</b>	<b>CA SP</b>
Expenses paid by Core on behalf of SP	\$ 2,500	
Total due to Core	\$ 2,500	
Participation fee deposit transferred by Core to EQ/ TC SP	\$ 13,420,008	\$ -
Expenses reimbursement through Core	193,640	-
SP premium received by XSR SP on behalf of EQ/TC	-	1,285,000
Expenses paid by XSR SP on behalf of CA SP	-	15,000
Total due to Segregated Portfolios	\$ 13,613,648	\$ 1,285,000
	\$ 15,000	\$ 15,000

During the year ended May 31, 2016, the Board of Directors approved segregated portfolio rental fees charged by the Core to the Segregated Portfolios of \$1,500,000 to EQ/TC SP, \$400,000 to XSR SP and \$675,000 to CA SP.

**18. 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 8.

**(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, 2016 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). EQ/TC, XSR and CA SP have entered into parametric reinsurance arrangements with unrelated reinsurers. Parametric reinsurance ceded contracts do not relieve the EQ/TC, XSR or CA SP from their obligations under the parametric insurance contracts they have issued. EQ/TC, XSR and CA SP remain liable under its parametric insurance contracts for the portion reinsured to the extent that reinsurers do not meet their obligations to the Company assumed under the parametric reinsurance agreements. The credit risk is managed by transacting only with counterparties considered highly reputable and creditworthy and within established investment/derivative guidelines.

**(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.

## CCRIF SPC

### FINANCIAL STATEMENTS

#### FOR THE YEAR ENDED MAY 31, 2016

(Expressed in United States dollars)

#### **18. Certain risks and financial instruments (continued)**

##### **(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 8 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 8). 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.

##### **(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, 2016 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.

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 8 to indicate the extent of the Group's exposure to such instruments. At May 31, 2016, the Group had no open swap contracts (see Note 8).

## CCRIF SPC

### FINANCIAL STATEMENTS

FOR THE YEAR ENDED MAY 31, 2016

(Expressed in United States dollars)

#### **18. Certain risks and financial instruments (continued)**

##### **(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.

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.

##### **(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.

CCRIF SPC

FINANCIAL STATEMENTS

FOR THE YEAR ENDED MAY 31, 2016

(Expressed in United States dollars)

**19. Subsequent events**

Management has performed a subsequent events review from June 1, 2016 to September 16, 2016, being the date that the financial statements were available to be issued. Management concluded that the following subsequent events require additional disclosure in these financial statements.

Subsequent to year end, Tropical cyclone Earl affected one of the Participating Countries under the Company's parametric contracts. However, preliminary runs of the Company's loss model indicated that none of the affected Participating Countries had reached the attachment points that would trigger a claim and therefore no payout is due.

Subsequent to year end, an Earthquake event affected one of the Participating Countries under the Company's parametric contracts. The Participating Country has reached the attachment point that would trigger a claim and therefore payout of \$500,000 was made by the Central America SP. This amount is fully recoverable under the donor fund arrangement disclosed in Note 6

Subsequent to year end, an excess rainfall event affected one of the Participating Countries under the Company's parametric contracts. The Participating Country has reached the attachment point that would trigger a claim and therefore payout of \$261,073 will be made by XSR SP.

**SUPPLEMENTAL INFORMATION**

**CCRIF SPC**

**BALANCE SHEET**

**MAY 31, 2015**

(Expressed in United States dollars)

	<b>Core</b>	<b>EQ/TC SP</b>	<b>XSR SP</b>	<b>LPC SP</b>
	\$	\$	\$	\$
<b>ASSETS</b>				
Cash and cash equivalents	5,291,842	12,047,100	1,238,998	355,391
Investments, at fair value	52,719,537	36,890,394	18,051,515	4,696,659
Development costs	388,333	-	-	-
Accrued interest	363,393	421,263	196,642	49,099
Due from Core Company	-	13,741,767	127,574	-
Due from Segregated Portfolios	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	204,430	323,095	140,118	42,922
Due to Core Company	-	-	-	13,940
Due to Segregated Portfolios	13,869,341	2,546,538	-	-
Income from parametric contracts received in advance	-	1,425,000	106,250	-
Participation fee deposits	-	13,420,008	-	-

Total liabilities

14,466,890	17,763,249	315,340	67,802
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**Shareholder's equity**

Share capital	1,000	-	-	-
Non-voting, redeemable preference shares	-	1	1	1
Share premium	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
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Total liabilities and shareholder's equity

58,867,669	63,100,524	22,161,267	5,101,149
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**SUPPLEMENTAL INFORMATION**

**CCRIF-SPC**

**STATEMENT OF OPERATIONS**

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

(Expressed in United States dollars)

	Core	EQ/TC SP	XSR SP	LPC SP
	\$	\$	\$	\$
<b>Operating income</b>				
Income from parametric insurance contracts	-	18,357,500	3,591,250	-
Discounts awarded on parametric insurance contracts	-	(5,340,288)	(1,044,712)	-
Expenses on parametric reinsurance contracts	-	(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)	-
<b>Operating expenses</b>				
Claims paid on parametric insurance contracts	-	-	3,393,004	-
Claims recovered on parametric insurance contracts	-	-	(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)	-
<b>Other income and expenses</b>				
Investment income	2,292,664	629,163	299,690	37,847
Income from Donor Funds	83,544	-	-	-
Amortisation of development costs	(55,667)	-	-	-
Technical assistance expenses	(428,341)	-	-	-
Central American Initiative	(108,903)	-	-	-
Segregated portfolio rental fees	1,900,000	(1,500,000)	(400,000)	-
Administrative expenses	(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

**SUPPLEMENTAL INFORMATION**

**CCRIF-SPC**

**STATEMENT OF CASH FLOWS**

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

(Expressed in United States dollars)

	<b>Core</b>	<b>EQ/IC SP</b>	<b>XSR SP</b>	<b>LPC SP</b>
	\$	\$	\$	\$
<b>Operating activities</b>				
Net income for the year	1,575,493	2,837,275	(3,154,073)	33,347
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*	-	(410,000)	-	-
Change in fair value of investments	3,363,870	533,303	253,303	87,919
Net realized (gains) / losses on investments	(1,111,674)	127,043	71,032	32,109
Change in unrealized loss on derivative instruments	380,375	323,095	140,118	42,923
Amortisation of development cost	55,667	-	-	-
Trading Securities:				
Purchase of securities	(41,781,564)	(8,703,397)	(3,924,882)	(1,162,407)
Proceeds from sale of securities	50,681,962	7,488,877	3,611,545	867,910
Net movement in short term investments	1,422,284	-	-	-
Due from investment broker	568,691	-	-	-
Changes in assets and liabilities:				
Accrued interest	681,953	(421,263)	(196,642)	(49,099)
Amounts due from Donor Funds	66,948	-	-	-
Prepaid expenses	124,423	-	-	-
Accounts payable	(174,529)	48,608	68,972	10,940
Income from parametric contracts received in advance	(2,475,000)	1,425,000	106,250	-
Participation fee deposits	(13,830,008)	13,830,008	-	-
Due to / (from) Core	13,855,401	(13,741,767)	(127,574)	13,940
Due to / (from) Segregated Portfolios	-	2,546,538	(2,546,538)	-
Net cash provided by / (used in) operating activities	13,404,292	5,883,320	(5,698,489)	(122,418)
<b>Investing activities</b>				
Development costs	(245,000)	-	-	-
Net cash used in investing activities	(245,000)	-	-	-
<b>Financing activities**</b>				
Capital distribution	(13,579,076)	-	-	-
Contribution of capital	-	6,163,780	6,937,487	477,809
Net cash provided by / (used in) financing activities	(13,579,076)	6,163,780	6,937,487	477,809
<b>Net change in cash and cash equivalents</b>	(419,784)	12,047,100	1,238,998	355,391
<b>Cash and cash equivalents at the beginning of year</b>	5,711,626	-	-	-
<b>Cash and cash equivalents at the end of year</b>	5,291,842	12,047,100	1,238,998	355,391
Interest and dividends received	3,345,048	280,708	144,995	25,738

SUPPLEMENTAL INFORMATION

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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.

\*\* 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.

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



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