



# Annual Report 2012 - 2013



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*CCRIF, a not-for-profit company, is the first multi-country risk pool in the world*



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## CCRIF ANNUAL REPORT 2012-13

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**Published by:**

Caribbean Catastrophe Risk Insurance Facility  
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103 South Church Street  
P.O. Box 1087  
Grand Cayman, KY1 – 1102  
Cayman Islands

**October 2013**

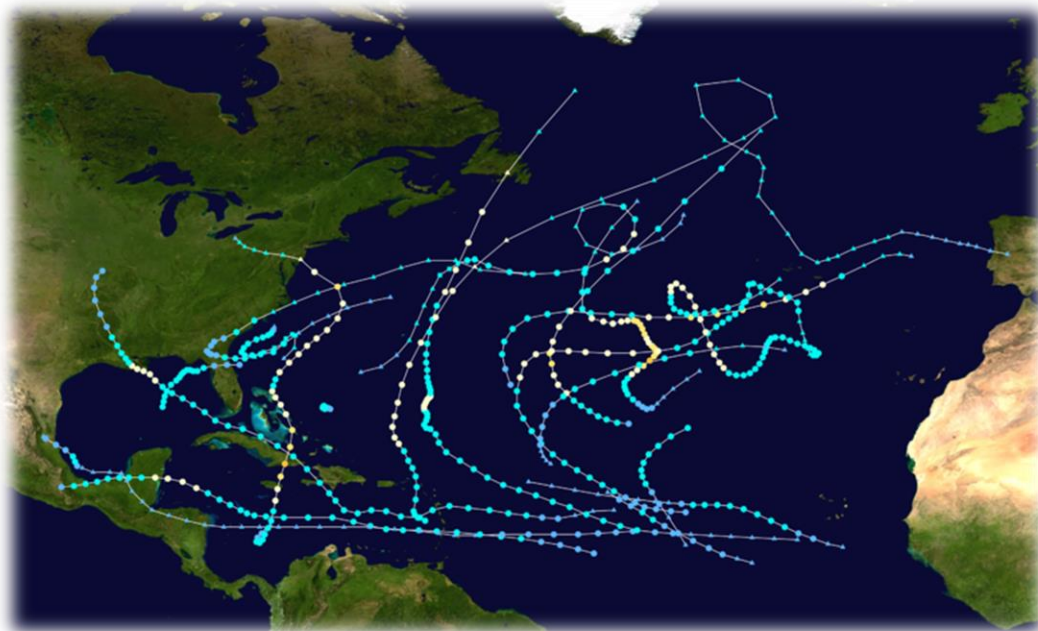
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An interactive version of the report is available on the CCRIF website ([www.ccrif.org/publications/ccrif-annual-report-2012-2013](http://www.ccrif.org/publications/ccrif-annual-report-2012-2013)). This interactive version contains links to other CCRIF reports and other sources with more information on CCRIF activities than is highlighted in this report.

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*Map showing paths of tropical cyclones in 2012 Source: NHC*

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## LIST OF ACRONYMS

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AOSIS	Alliance of Small Island States
BMU	German Federal Ministry of the Environment and Nuclear Safety
CaribRM	Caribbean Risk Managers Ltd.
CARICOM	Caribbean Community
CCCCC	Caribbean Community Climate Change Centre
CCRIF	Caribbean Catastrophe Risk Insurance Facility
CDA	Child Development Agency (Jamaica)
CDB	Caribbean Development Bank
CDEMA	Caribbean Disaster Emergency Management Agency
CDM	Comprehensive Disaster Management
CEO	Chief Executive Officer
CICA	Captive Insurance Companies Association
CIMA	Cayman Islands Monetary Authority
CIMH	Caribbean Institute for Meteorology and Hydrology
COSEFIN	Council of Ministers of Finance of Central America, Panama and Dominican Republic
DMS	Document Management System
ECA	Economics of Climate Adaptation
FADA	Fondation Amour de Dieu (Haiti)
FY	Fiscal Year
GDP	Gross Domestic Product
GIZ	German Association for International Cooperation
IICA	Inter-American Institute for Cooperation on Agriculture
IISD	International Institute for Sustainable Development
IKI	International Climate Initiative (Germany)
IMF	International Monetary Fund
IStructE	Institution of Structural Engineers
KAC	Kinetic Analysis Corporation
LPC	Loan Portfolio Cover
LPP	Livelihood Protection Policy
MCII	Munich Climate Insurance Initiative
MoU	Memorandum of Understanding
MPRES	Multi-Peril Risk Estimation System
NASA	National Aeronautics and Space Administration (USA)
NDC	National Disaster Committee
NEMA	National Emergency Management Agency (The Bahamas)
NGO	Non-Governmental Organisation
NHC	National Hurricane Center (USA)
NOAA	National Oceanic and Atmospheric Administration (USA)
ODPEM	Office of Disaster Preparedness and Emergency Management (Jamaica)
OECS	Organisation of Eastern Caribbean States

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PR	Public Relations
RTFS	Real-Time Forecasting System
SRC	Seismic Research Centre (University of the West Indies, St. Augustine, Trinidad)
TA	Technical Assistance
UK	United Kingdom
UN	United Nations
UNECLAC	United Nations Economic Commission for Latin America and the Caribbean
UNFCCC	United Nations Framework Convention on Climate Change
UNOCHA	United Nations Office for the Coordination of Humanitarian Affairs
UNU-EHS	United Nations University Institute for Environment and Human Security
US	United States
USA	United States of America
UTC	Coordinated Universal Time
UWI	University of the West Indies
XSR	Excess Rainfall



*Aerial image of Hurricane Sandy Source: NHC*

# ABOUT CCRIF



## The Caribbean Catastrophe Risk Insurance Facility

**T**he Caribbean Catastrophe Risk Insurance Facility (CCRIF) is the first multi-country risk pool in the world, and is also the first insurance instrument to successfully develop parametric policies backed by both traditional and capital markets. It is a regional catastrophe fund for Caribbean governments designed to limit the financial impact of hurricanes and earthquakes by quickly providing financial liquidity when a policy is triggered.



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 eight payouts for hurricanes or earthquakes totalling over US\$32 million to seven member governments. All payouts were transferred to the respective governments less than a month (and in some cases within a week) after each event.

In response to requests from Caribbean governments, CCRIF has developed an excess rainfall product to provide coverage to countries following a period of intense rainfall. This new product will complement the Facility's hurricane insurance which is based on wind and storm surge.

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

The Facility is set up as a captive and is registered in the Cayman Islands. It operates as a virtual organisation, supported by a network of service providers covering the areas of risk management, risk modelling, captive management, reinsurance, reinsurance brokerage, asset management, corporate communications and information technology.

By providing instruments for financial risk transfer, the CCRIF model has helped to add the element of pre-event disaster risk mitigation to the standard focus on post-event relief, rehabilitation and reconstruction, thus generating discussion on a new paradigm for disaster risk management and climate change adaptation.

### Sixteen Governments are Currently Members of CCRIF:

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

*CCRIF, a not-for-profit company, is the first multi-country risk pool in the world*  
[www.ccrif.org](http://www.ccrif.org) | [pr@ccrif.org](mailto:pr@ccrif.org)

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# CCRIF STRATEGIC FRAMEWORK

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## CCRIF Vision Statement

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

## CCRIF Mission Statement

Our Mission is to assist Caribbean governments and their communities in understanding and reducing the socio-economic and environmental impacts of natural catastrophes.

We do this by providing immediate liquidity through a range of affordable insurance products, developing innovative and dynamic tools and services, and operating in a way that is financially sustainable and responsive to the needs of the region.

## CCRIF Value Proposition

The clients of CCRIF are the member countries of the Caribbean Community (CARICOM). CCRIF promises its clients to:

1. Fill a gap in available insurance offerings in natural catastrophes
2. Give peace of mind and confidence re financial support
3. Provide technical assistance to enhance disaster risk assessment
4. Assist them to better understand how risk financing fits into the broader disaster risk management framework
5. Offer the lowest possible premiums consistent with long-term sustainability
6. Ensure speedy payout when a policy is triggered
7. Be transparent and accountable



## STRATEGIC OBJECTIVES

CCRIF's strategic objectives are designed to enable the Facility to fulfil its mission and realise 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 2013 to 2015, CCRIF will endeavour to achieve the following strategic objectives:



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## CHAIRMAN'S REPORT

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I am pleased to present the 2012-13 CCRIF Annual Report that summarises the Facility's results over the period and demonstrates its continued commitment to meeting the needs of our member countries and other partners in the Caribbean region.

First, on behalf of the CCRIF Board and Team, I would like to welcome Mr. Isaac Anthony who was appointed as CCRIF's first full-time Chief Executive Officer, effective January 1, 2013. Prior to his appointment, Mr. Anthony served for five years as a CARICOM-nominated member of the Facility's Board of Directors, representing participating countries, and was the Permanent Secretary for Planning and National Development in the Government of Saint Lucia. Engaging a dedicated CEO was a significant step towards ensuring business continuity for CCRIF and building its capacity to engage members on a closer and more sustained basis regarding their needs and will facilitate the further development of partnerships with Caribbean entities and the expansion of products and services offered by the Facility. I look forward to working with Isaac in his new capacity.

Near the end of this fiscal year – one year into CCRIF's new strategic planning period – the Board of Directors held a one-day review of the 2013-2015 Strategic Plan to re-examine the key elements of the Plan based on CCRIF's experience and performance thus far and to determine whether CCRIF is meeting the needs of its members and stakeholders, and achieving its vision and mission. As a result of this review, the customer value proposition and annual targets were sharpened to better reflect CCRIF's work and our members' needs. The new value proposition is reflected in this report.

With respect to our members, I am pleased to report that all sixteen CCRIF member countries renewed their Hurricane and Earthquake policies in 2012. For the 2012-2013 policy year, which began on June 1, CCRIF provided its member countries with a premium rebate equal to 25% of the premium paid in the previous year. This came on the heels of a quiet 2011-2012 policy year in which none of the policies held by member countries were triggered.

Also, for this policy year, members were again allowed to fund up to half of their premium with a portion of their paid-in Participation Fee. This is a continuation of the revised policy for members who have reached three continuous years of coverage with the Facility. Several countries utilised this option.

Like the previous year, the 2012 Atlantic Hurricane Season (June to November 2012) was very active despite initial predictions of lower than average activity. During the season, a total of nineteen named storms formed. Although four of these storms affected nine CCRIF member countries, none were of sufficient magnitude or proximity to trigger the tropical cyclone policy of any member. Similarly, during this policy year there were no reportable

earthquakes which affected any CCRIF member country. Therefore, for this policy year no CCRIF earthquake policies were triggered.

This year CCRIF continued to work with and assist our member countries and regional partners in a number of key areas. These areas are highlighted below.

## **HIGHLIGHTS OF THE FISCAL YEAR 2012 - 2013**

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For the first time, CCRIF offered the new excess rainfall product to countries in the region, including countries which are not (yet) CCRIF members. This excess rainfall product, developed in partnership with Swiss Re, has been designed as a rainfall hedge rather than to replicate actual loss from the various hazards related to heavy rainfall. We are continuing to work with partners on the refinement of a regional rainfall model, as CCRIF believes that this will provide the best long-term platform for excess rainfall coverage.

This year we continued to implement a number of programmes and projects, strengthened our alliances with regional partners and developed new partnerships with other key organisations – under the auspices of the CCRIF Technical Assistance Programme. Under that programme, the CCRIF Board also approved grants to Jamaica, Haiti and The Bahamas which had been affected by Hurricane Sandy in October 2012, although not to the extent of triggering their tropical cyclone policies. The grants supported the countries' post-Sandy recovery efforts by providing funds for specific, community-level projects selected by disaster managers and other key stakeholders in these countries.

I am happy to report that the first two Caribbean students were awarded scholarships under the CCRIF extra-regional scholarship programme to study Environmental Science & Policy and Climate Change & Development in the USA and the UK, respectively. In addition, our scholarship programme with the University of the West Indies continued. Since this programme began in 2010, we have provided scholarships to fourteen students.

The development of two new products under the Climate Risk Adaptation and Insurance in the Caribbean Project went well this year in three pilot countries (Saint Lucia, Jamaica and Grenada) under the leadership of the Munich Climate Insurance Initiative, in collaboration with CCRIF, MicroEnsure and Munich Re, and funded by the German Environment Ministry. The two products – the Livelihood Protection Policy (LPP) and the Loan Portfolio Cover (LPC) – will help vulnerable people adapt to extreme weather events such as wind and rainfall. I am pleased to note the launch of the LPP in Saint Lucia in May 2013. The LPP will be offered by local insurance companies in each of the three countries, reinsured by Munich Re. CCRIF will be the insurer for the LPC, which will be finalised in the coming year.

CCRIF continued to work with our Caribbean partners to build capacity and share knowledge in the region regarding disaster risk management and climate change adaptation. This year we signed one new memorandum of understanding, with the Inter-American Development Bank, bringing to seven the number of MoUs that CCRIF has with

key organisations that deal with education, research and national and regional development in the Caribbean. CCRIF also proceeded far along the path to signing yet another MoU – with the University of the West Indies.

This year, CCRIF was singled out for high commendation within the insurance sector. We were particularly pleased to be awarded the Captive Insurance Companies Association 2013 Outstanding Captive Award.

Within international discussions and negotiations on climate change, CCRIF continues to be cited as an innovative working model of a multi-country, multi-peril and parametric-based catastrophe risk pool and is considered a viable template for expansion and/or replication globally as part of the overall climate change adaptation framework. Also, CCRIF continues to be engaged in discussions on damage and examining the role that insurance can play in adaptation to climate change and in promoting climate resilient development.

In the coming year, we look forward to working with our member countries and our regional partners and to continuing to contribute to the sustainable development of the Caribbean region.

A handwritten signature in blue ink, appearing to read 'Milo Pearson', is positioned above the printed name.

Milo Pearson  
Chairman

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## BOARD OF DIRECTORS

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### **Milo Pearson, Chairman**

Milo Pearson has over 40 years of insurance experience and has created two landmark organisations 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, Pearson specialises in regulatory and catastrophe-related issues. He is also the Executive Director for the Pacific Association of Domestic Insurance Companies, an industry trade association.



### **Ken Blakeley, CARICOM-nominated board member, insurance specialist**

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



### **Desirée Cherebin, Caribbean Development Bank-nominated board member, finance specialist**

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



### **Faye Hardy, Caribbean Development Bank-nominated board member, representing donors**

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

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# OFFICE OF THE CHIEF EXECUTIVE OFFICER

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**Isaac Anthony**  
**Chief Executive Officer**

Isaac Anthony was appointed CCRIF Chief Executive Officer on January 1, 2013. Prior to this appointment Isaac 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 for the past five years. Isaac 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 (double major) and an MBA from that institution.

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## CCRIF TEAM



### **Caribbean Risk Managers Ltd., Facility Supervisor**

Caribbean Risk Managers Limited (CaribRM) was formed through the merger of GeoSY (a consultancy company led by Dr. Simon Young) and the risk management arm of the CGM Gallagher Group. As Facility Supervisor, CaribRM is responsible for leading the operational and risk management functions within CCRIF. CaribRM has completed projects for clients in both the public and private sectors throughout the Caribbean and beyond. CaribRM is headed by Simon Young who is supported by the rest of the CaribRM technical team. CaribRM has offices in Barbados, Jamaica and Washington DC.



### **EFG Bank – Cayman Branch, Asset Manager**

EFG Bank – Cayman Branch is the Cayman private banking subsidiary of EFG International. Headquartered in Zurich, EFG has its main operating hub in Geneva, with an international network spanning Europe, the Middle East, Asia Pacific and Latin America. Barlo MacLean is EFG Bank's CCRIF representative based in Cayman.



### **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.



### **Guy Carpenter & Company, LLC, Reinsurance Broker**

Guy Carpenter & Company, LLC joined the CCRIF Team as the new Placing Broker for the Facility in March 2011. Guy Carpenter is the world's leading risk and reinsurance specialist and a member of Marsh & McLennan Companies. With over 50 offices worldwide, Guy Carpenter creates and executes reinsurance solutions and delivers capital market solutions for clients across the globe. Aidan Pope is Guy Carpenter's team leader for CCRIF.



### **Sagicor Insurance Managers Ltd., Insurance Manager**

Sagicor Insurance Managers Ltd. (SIM) is a member of the Sagicor Financial Group, which is listed on the Barbados, Trinidad & Tobago and London Stock Exchanges. Formed originally as Barbados Mutual in 1840, Sagicor has become the leading indigenous financial services organisation 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. Antoinette Livingston is Sagicor's team leader for CCRIF.



### **Sustainability Managers, Corporate Communications Manager**

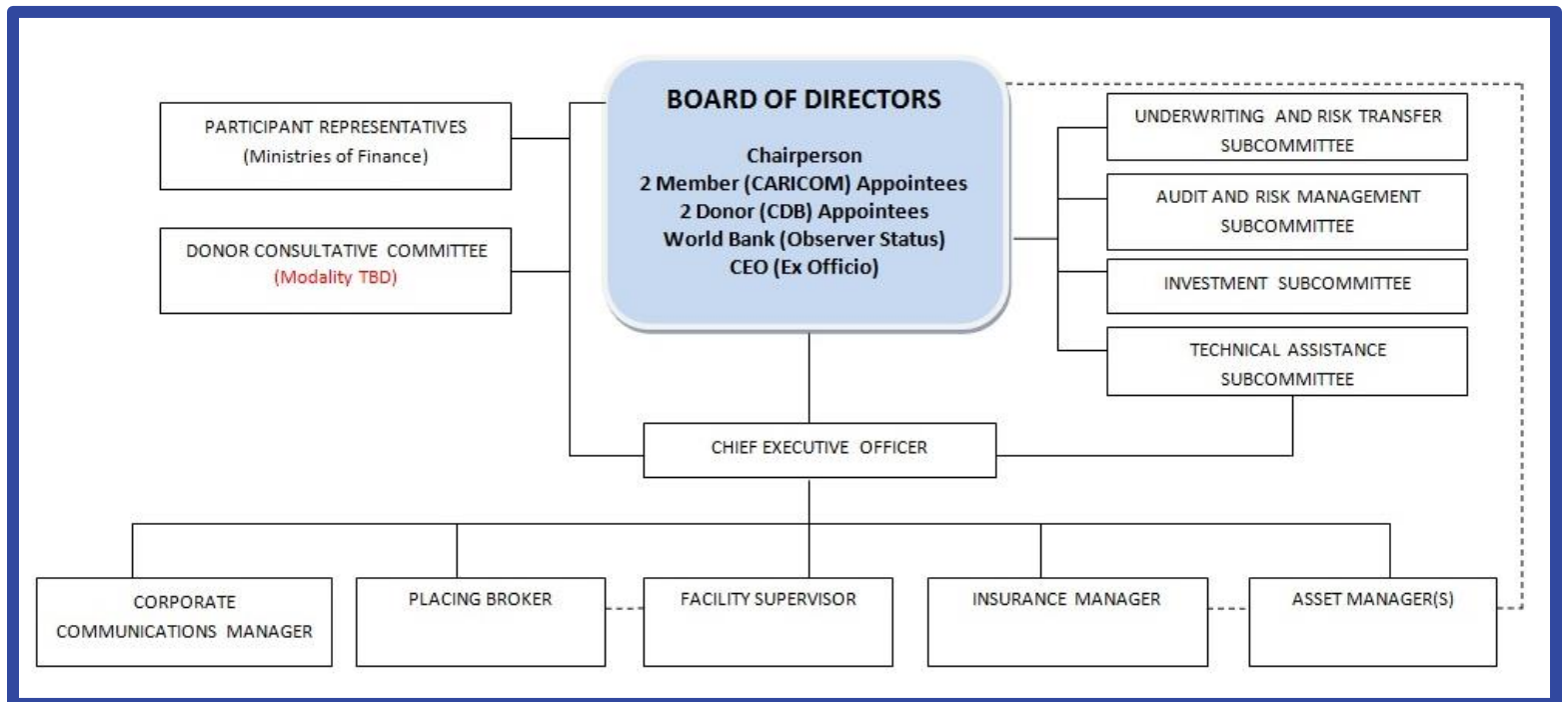
Sustainability Managers is a consultancy company based in Jamaica that offers a range of services to public and private sector entities as well as international and regional organisations. As Corporate Communications Manager, Sustainability Managers provides CCRIF with the following services: publications development; events planning; public relations and media relations management; strategic planning; and training. Elizabeth Emanuel and Gina Sanguinetti Phillips are Sustainability Managers' team leaders for CCRIF.

# CCRIF ORGANISATIONAL 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 Chief Executive Officer (CEO).

The six service providers are:

- Facility Supervisor
- Insurance Manager
- Reinsurance Broker
- Asset Manager (there are two asset management companies)
- Corporate Communications Manager





# **CCRIF YEAR IN REVIEW 2012/2013**



## CCRIF YEAR IN REVIEW 2012/2013

### Tropical Cyclone and Earthquake Review

- 19 tropical cyclones
- No major earthquakes
- No CCRIF policies triggered over the 2012/13 policy year

### CCRIF's Financial Stability

- CCRIF issued 29 annual policies to 16 CARICOM countries
- CCRIF comfortably met its own sustainability guidelines of being able to survive a one in 1,000 year event

### CCRIF Product Developments

- Excess Rainfall Product
- Real-Time Forecasting System
- Revised Country Risk Profiles

### Programmes, Projects and Partnerships

- Post-Sandy recovery assistance
- Climate Risk Adaptation and Insurance in the Caribbean Project – Livelihood Protection Policy launched, Loan Portfolio Cover developed
- Work programmes for 7 MoUs being developed and/or implemented
- 1 new MoU signed – with IDB
- 2 extra-regional scholarships awarded
- 7 scholarships to UWI awarded

### Communications Publications and Public Relations

- CCRIF received 2013 CICA Award
- 15 publications produced
- With CDB, hosted Strategic Donor Meeting
- Sponsored Caribbean CDM Conference

# CCRIF'S FINANCIAL STABILITY

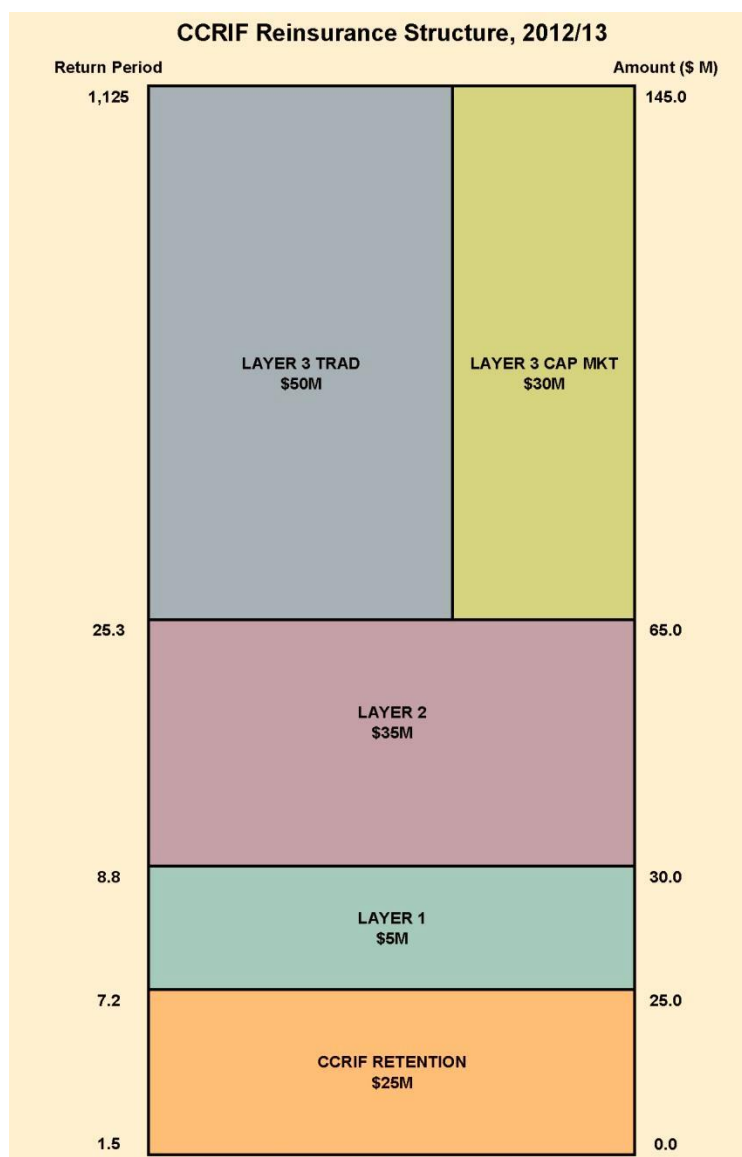


## CCRIF'S FINANCIAL STABILITY

CCRIF issued 29 annual policies to 16 CARICOM countries for the 2012-2013 policy/financial year. Annual premium income totalled just over US\$20 million, split approximately 60:40 between tropical cyclone and earthquake coverage. CCRIF's aggregate exposure for policies written was just over \$625 million, with the tropical cyclone to earthquake aggregate split being about the same as the premium split. CCRIF maintained a premium to pure risk multiple of 1.75 for all coverage.

CCRIF purchased US\$120 million of reinsurance capacity above a US\$25 million retention to support the claims paying capacity of the Facility (see figure at right). Reinsurance was purchased from the international reinsurance markets, including Swiss Re, Munich Re, Partner Re, Hanover Re and Lloyd's of London syndicates Hiscox, Catlin and Beazley. US\$30 million of the top layer of risk was placed into the capital markets via a catastrophe swap between CCRIF and the World Bank Treasury. The top of the reinsurance structure, at \$145 million, provided claims paying capacity for aggregate annual losses with an approximately 1 in 1,125 chance of occurring.

Thus even without CCRIF's own additional capital (above the \$25 million retention), the claims paying capacity of CCRIF for the 2012-2013 policy year was 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 substantially better than any of its peers in either public or private sectors.



# **TROPICAL CYCLONE AND EARTHQUAKE REVIEW**



# TROPICAL CYCLONE AND EARTHQUAKE REVIEW

CCRIF monitors and reports on all tropical cyclone and earthquake events in the Caribbean Basin that have the potential to affect one or more of its member countries. Two types of events – non-triggering and triggering events – are defined and routinely reported by CCRIF to its members and stakeholders. The text box at right provides definitions of triggering and non-triggering events.

During the 2012/2013 policy year, four tropical cyclones qualified as reportable events, affecting nine CCRIF member countries (these storm events are described below). There no earthquakes that qualified as reportable events.

Damage to a particular territory from a named storm is strongly dependent on the distance between the storm and the territory, the intensity of the storm and the particular assets located in the areas that are affected by the storm.

**For the 2012/2013 policy year no CCRIF tropical cyclone or earthquake policies were triggered.**

## TROPICAL CYCLONES

The 2012 Atlantic Hurricane Season was extremely active contrary to early estimates by the National Oceanic and Atmospheric Administration (NOAA) which predicted a total of 9–15 named storms, 4–8 hurricanes, and 1–3 major hurricanes. Despite later updates by NOAA, activity in 2012 surpassed predictions. Although the Atlantic Hurricane Season officially begins on June 1<sup>st</sup> each year, the 2012 season began early with the formation of Tropical Storms Alberto and Beryl in May. In the period May to November 2012, a total of nineteen named storms formed. Ten storms became hurricanes of which two were major hurricanes (Category 3 or greater).

### Triggering Event

**Tropical Cyclone: Any Tropical Cyclone event which produces a modelled government loss of greater than zero in one or more countries.**

**Earthquake: Any earthquake event which produces a modelled government loss of greater than zero in one or more countries.**

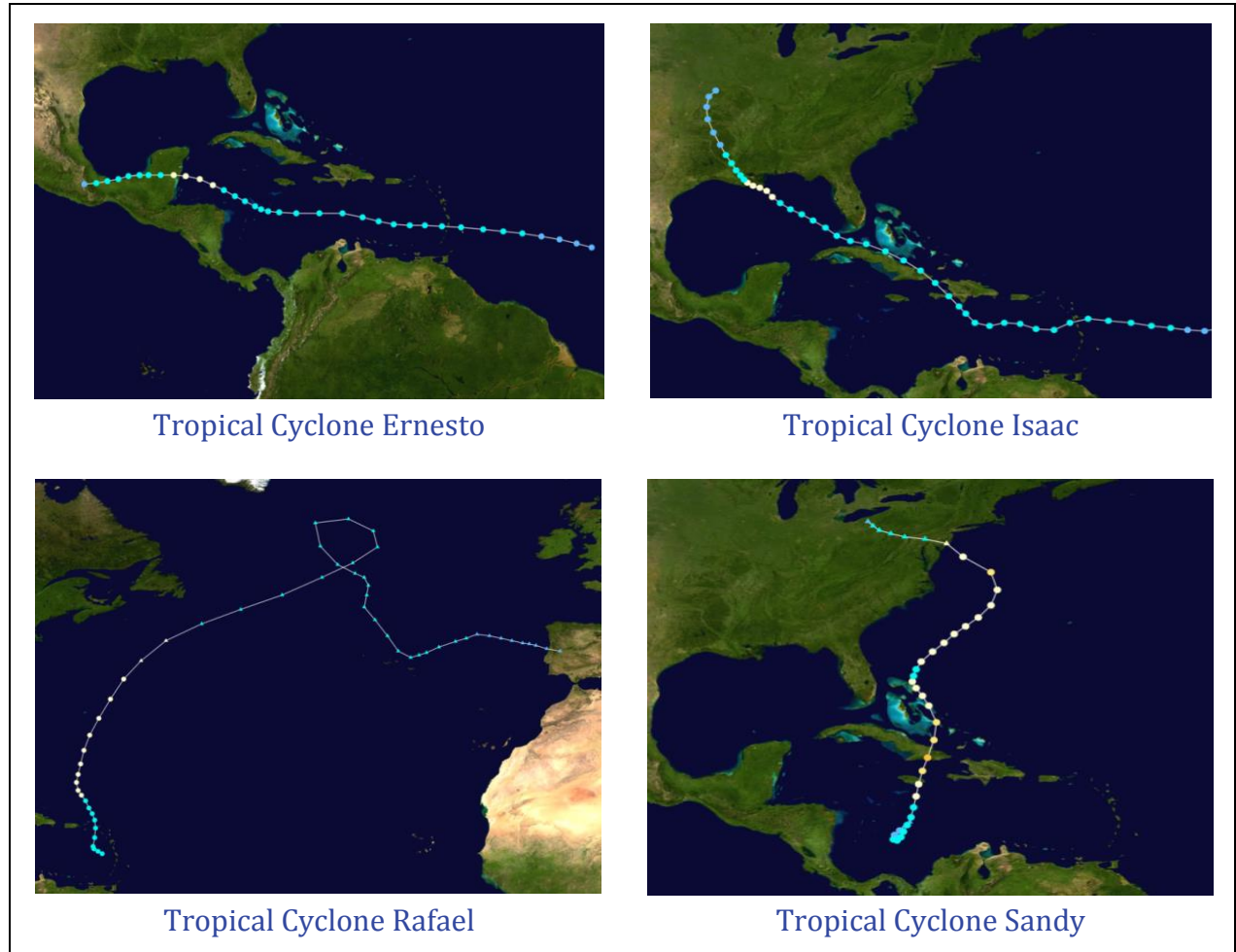
### Non - Triggering Event

**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 country but which does not produce any modelled government loss.**

**Earthquake: Any earthquake event with a body-wave magnitude of greater than or equal to 5.0 within an area bounded by Latitude 2° and 41° N and Longitude 97° and 51° W and which generates a peak ground acceleration of at least 0.01 g in one or more grid cells of at least one country but which does not produce any modelled government loss.**

The four tropical cyclones which qualified as reportable events for CCRIF were: Ernesto, Isaac, Rafael and Sandy. Figure 1 displays the paths of these storms. The CCRIF countries affected by each of these storms are as follows:

- **Ernesto:** Belize, Saint Lucia, St. Vincent & the Grenadines
- **Isaac:** Dominica, Haiti, Bahamas
- **Rafael:** St. Kitts & Nevis, Anguilla
- **Sandy:** Jamaica, Bahamas, Haiti

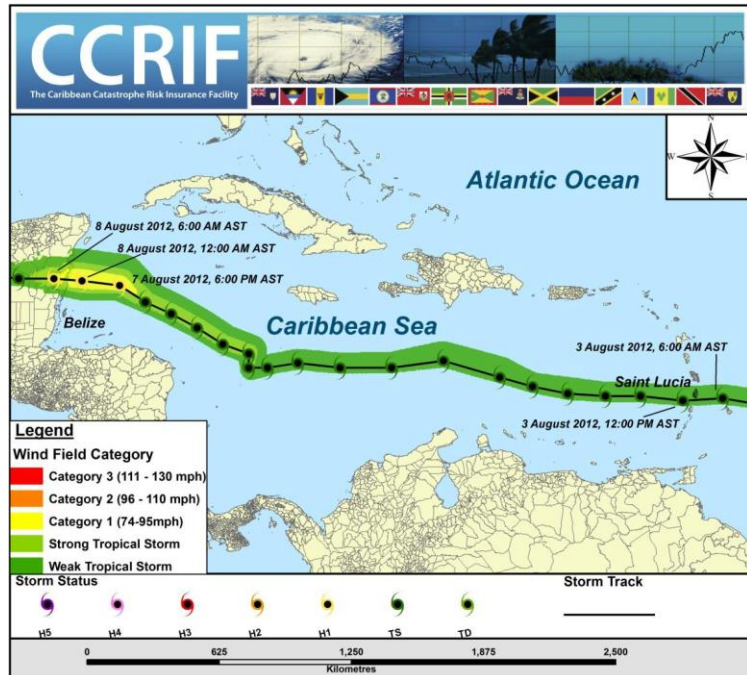


**Figure 1: Paths of the four Tropical Cyclones that affected CCRIF member countries in 2012**

*Source: NHC*

## Tropical Cyclone Ernesto

On August 3, 2012 at 1500 UTC, Tropical Storm Ernesto was situated about 90 miles (140 km) west of Saint Lucia packing maximum sustained winds of 50 mph (85 km/h) with stronger gusts. By August 7, Tropical Storm Ernesto was situated about 250 miles (405 km) east of Belize City and 180 miles (285 km) north east of Isla Roatan, Honduras. Maximum sustained winds were estimated at 65 mph (100 km/h) with stronger gusts and tropical storm force winds extended outward up to 125 miles (205 km) from the centre of Ernesto. Figure 2 shows the path of Tropical Cyclone Ernesto from its inception to when it dissipated.



**Figure 2: Map showing the path of Tropical Cyclone Ernesto and the CCRIF model wind footprint**  
**Source: NHC and CCRIF/KAC MPRES**

### Impacts on CCRIF Countries

The CCRIF member countries affected by at least tropical storm force winds of TC Ernesto (based on the MPRES footprint) were Belize, Saint Lucia and St. Vincent & the Grenadines, with the tropical storm wind footprint just missing Barbados.

There were no reports of significant damage as a result of the storm as it crossed the Lesser Antilles chain. Reported peak sustained winds were rarely above minimum tropical storm strength and rainfall was lower than had been anticipated due partly to the high forward speed of the system.

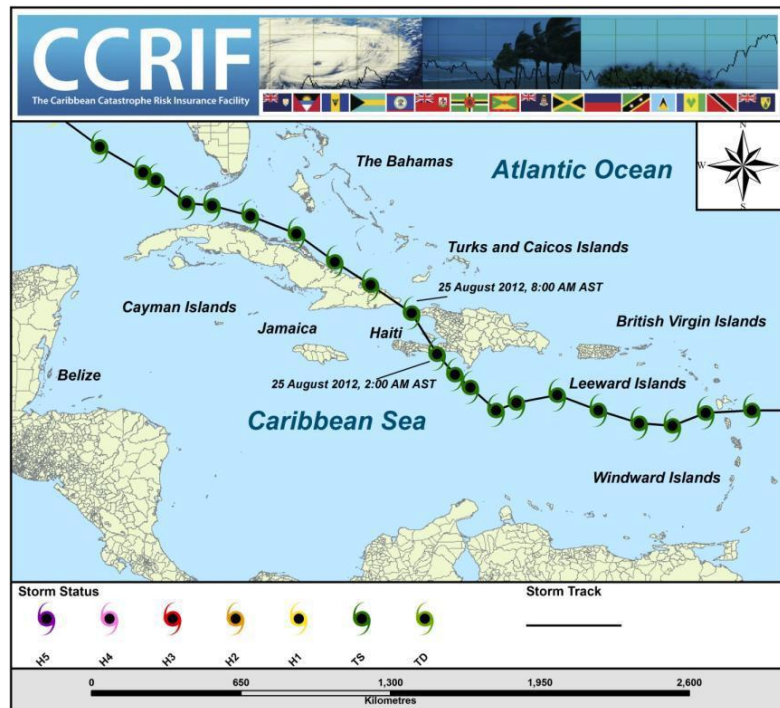
### CCRIF Model Outputs – Payout Determination

As expected for the level of modelled wind speed, the CCRIF loss model generated small government losses in the affected islands, which were well below each country’s trigger level and therefore no payout was due.



## Tropical Cyclone Isaac

At 1500 UTC on August 24, 2012, Tropical Storm Isaac was located approximately 165 miles (265 km) south south-west of Santo Domingo, Dominican Republic and 185 miles (300 km) south south-east of Port-au-Prince, Haiti with maximum sustained winds of 60 mph (95 km/h). By August 25, Isaac was moving in a northwesterly direction at a speed of approximately 13 mph (20 km/h) with tropical storm force winds extending outward up to 230 miles (370 km) from the centre. Isaac made landfall over the southwestern peninsula of Haiti just before dawn local time. Figure 3 shows the path of Tropical Cyclone Isaac as it moved over Haiti and south of the Bahamas.



**Figure 3: Map showing the path of Tropical Cyclone Isaac**  
**Source: NHC**

### Impacts on CCRIF Countries

The CCRIF member countries affected by at least tropical storm force winds from Isaac (based on the MPRES footprint) were Dominica, Haiti and The Bahamas.

There were no reports of significant damage in Dominica as a result of the storm as it crossed the Lesser Antilles chain. Reported peak sustained winds were only rarely above minimum Tropical Storm strength and rainfall was lower than had been anticipated.

As Isaac went through the Central Caribbean region, the storm pounded Haiti with heavy rains during the early morning of August 25, which resulted in flooding and mudslides. The Government reported that more than 14,000 persons had left their homes and another 13,500 were living in temporary shelters until the night of August 25. Mega IV Camp, which housed approximately 8,000 people in makeshift shelters, was affected by flooding and fallen trees which damaged hundreds of tents.



**Flooding in Haiti caused by Hurricane Isaac**

Preliminary reports indicated that there may have been as many as 19 fatalities as a result of this system. The United Nations (UN) confirmed that there was damage to the country's banana crop and the national electricity supplier confirmed that at one point most of the electricity grids were down. A dozen houses were destroyed and another 269 were damaged. However, Haiti's spokesman for the UN Office of Coordination of Humanitarian Affairs (UNOCHA) stated that the damage appeared to be less significant than expected.

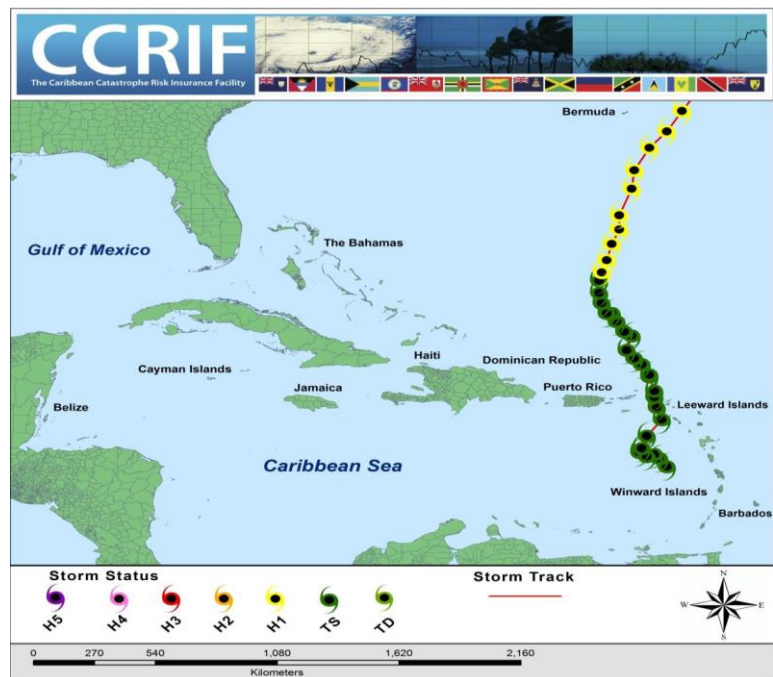
There were no reports of significant damage as a result of the storm as it crossed the southern Bahamian islands.

### CCRIF Model Performance - Payout Determination

The CCRIF loss model generated small government losses in the three affected countries, consistent with reports from the field and these losses in all cases were below each country's trigger level. Therefore no payout was due.

### Tropical Cyclone Rafael

Tropical Storm Rafael formed on October 12, 2012 (Figure 4 shows its path). As it moved in a northwesterly direction the system passed west of St. Kitts & Nevis and by the evening of October 13, the centre of Rafael was between St. Martin and St. Croix. Rafael was upgraded to a Category 1 Hurricane with winds of 85 mph (140 km/h) upon clearing the Lesser Antilles chain. By the afternoon of October 16, the outer bands of Rafael began to affect Bermuda with heavy rains. Hurricane force winds extended outward up to 35 miles (55 km) from the centre and tropical storm



force winds extended outward up to 205 miles (335 km).

**Figure 4: Map showing the path of Tropical Cyclone Rafael**  
**Source: NHC**

### Impacts on CCRIF Countries

Based on the MPRES footprint, the CCRIF member countries affected by at least tropical storm force winds in the Eastern Caribbean region from Rafael were St. Kitts & Nevis and Anguilla. The St. Kitts Meteorological Office confirmed that St. Kitts experienced peak

sustained winds of Tropical Storm strength and approximately 12.31 inches of accumulated rainfall while Nevis experienced approximately 7 inches.

There were no reports of significant damage as a result of the storm as it crossed the Lesser Antilles chain.

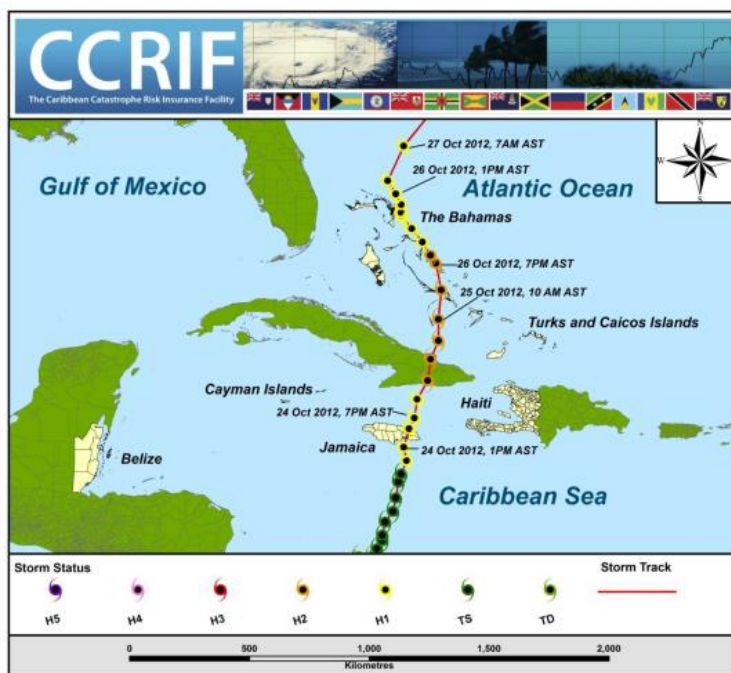
### CCRIF Model Performance – Payout Determination

The CCRIF loss model generated small government losses in the affected countries, and these losses in both cases were below each country’s trigger level. Therefore no payout was due.

### Tropical Cyclone Sandy

Tropical Storm Sandy formed on October 22, 2012 and on October 24, Sandy developed into a hurricane while approaching the southeastern coast of Jamaica, with maximum sustained winds of 80 mph (130 km/h). By the evening, having crossed eastern Jamaica, the eye of Hurricane Sandy was located between Jamaica and Cuba, west of the coast of Haiti. From the centre of Sandy, the hurricane and tropical storm force winds extended outward up to 30 miles (45 km) and 140 miles (220 km) respectively.

Sandy was upgraded to a Category 2 hurricane while moving off the coast of Cuba, approximately 185 miles (300 km) south of the central Bahamas islands. On October 25, Sandy approached the Bahamas with maximum sustained winds still at 105 mph (165 km/h) and moving in a northerly direction at a speed of 20 mph (32 km/h). The maximum sustained winds decreased to 75 mph (120 km/h) the following day as the system continued to affect the islands before reaching the open Atlantic late on October 26. Figure 5 shows its path.



**Figure 5: Map showing the path of Tropical Cyclone Sandy**  
**Source: NHC**

### Impacts on CCRIF Countries

Based on the MPRES footprint, the CCRIF member countries affected by at least tropical storm force winds in the central Caribbean region from Sandy were Jamaica and The

Bahamas (see Figure 6). Sandy produced heavy rains as it passed west of the coast of Haiti but no part of Haiti was within the tropical storm wind footprint of MPRES.

As a result of the passage of Sandy across eastern Jamaica there were reports of damage to crops, roads, bridges and houses in the parishes of St. Mary, St. Thomas and Portland. The Jamaica Public Service Company worked to restore power as 70 per cent of its customer base was without electricity. Preliminary estimates from the Ministry of Agriculture indicate that approximately 11,000 farmers were affected and about 1,500 hectares of crops destroyed. There was one confirmed fatality in Jamaica as a result of Sandy.



***Damage in Jamaica caused by Hurricane Sandy***

In Haiti, the rain-laden outer bands of Hurricane Sandy triggered extensive flooding which resulted in widespread damage to homes and crops. As of October 29, reports from Haiti indicated that there were 51 fatalities as a result of this storm and 15 people were missing.



***Damage in Haiti caused by Hurricane Sandy***

Reports from The Bahamas indicated that the storm inflicted the most severe damage on Cat Island which took a direct hit, and Exuma where there was also damage to homes, downed trees and utility poles. There were reports of flooding and power outages on Acklins Islands and also flooding on Ragged Island. Abaco Island also experienced some flooding, collapsed trees and damage to roof shingles of buildings. There were reports of damage to crops on Long Island and structural damage to homes and roofs of several buildings. There were reportedly two deaths as a result of the passage of Sandy.

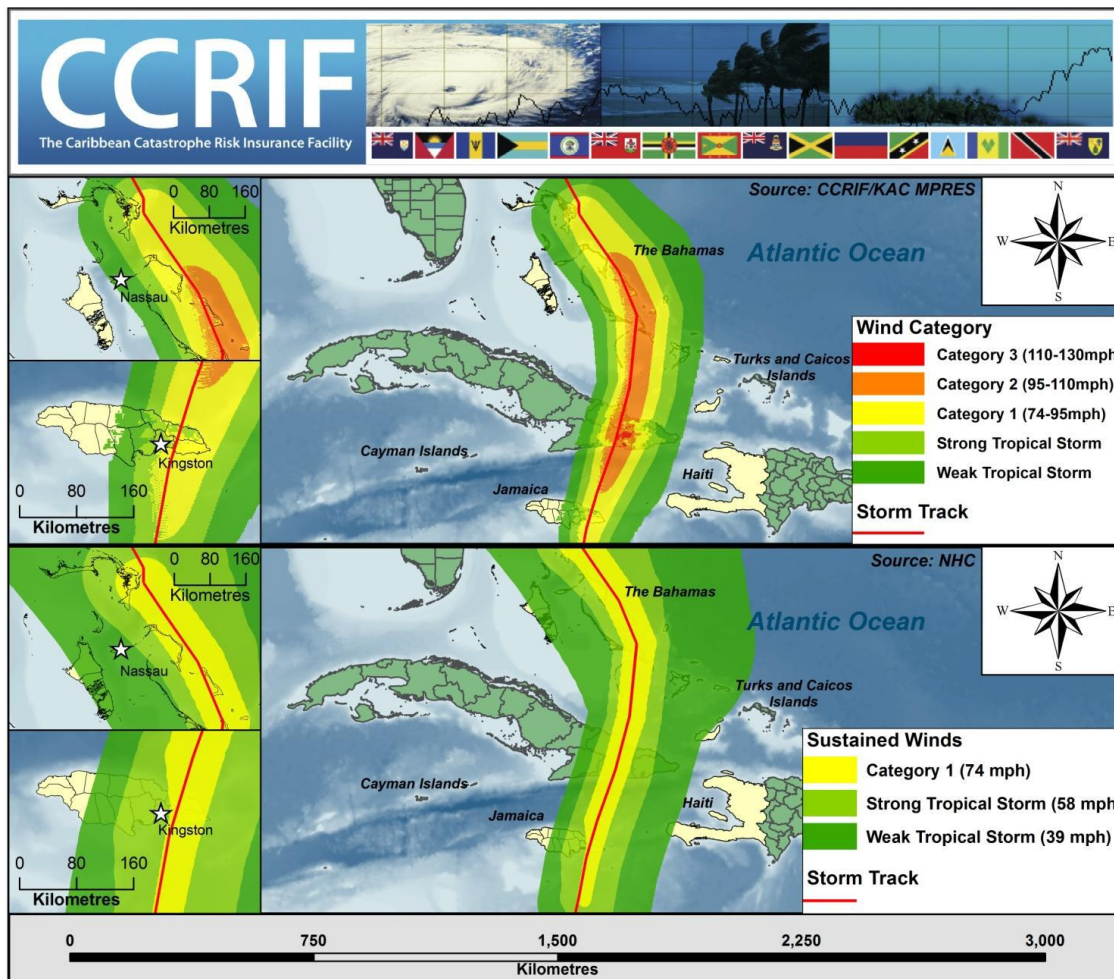


***Damage in The Bahamas caused by Hurricane Sandy***

### CCRIF Model Performance - Payout Determination

The runs of the CCRIF loss model generated modest government losses due to wind and storm surge in the affected countries (Jamaica and The Bahamas), which in both cases were below each country’s trigger level (attachment point) that it had selected for its tropical cyclone (TC) policy and therefore no payout was due.

Assessment of on-the-ground impacts in Jamaica and The Bahamas indicated that government losses from wind and storm surge were consistent with the model outputs. However, rain damage, which is not taken into account in the CCRIF TC model, caused additional impacts in these two countries and was the sole driver of damage in Haiti. Since rainfall is not covered under CCRIF TC policies, losses caused by rain did not contribute to the triggering of the policies of any of these three countries.



**Figure 6: Comparison of NHC and CCRIF model wind footprint for Sandy.**  
**Source: NHC and CCRIF/KAC MPRES**

# CCRIF PRODUCT DEVELOPMENTS



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## CCRIF PRODUCT DEVELOPMENTS

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CCRIF's product developments are aligned to two of its strategic objectives:

1. To provide products, services and tools responsive to the needs of the region
2. To enhance capacity for disaster risk management and climate change adaptation

CCRIF's primary focus is on ensuring that it meets the needs of current and potential future member countries. The Facility is continuously seeking to improve its products and services as well as to develop new initiatives of interest to stakeholders. CCRIF continues to offer its tropical Cyclone and earthquake policies to its member countries; the Facility works with its members to define adequate coverage levels and with key donors to facilitate members attaining these levels of coverage.

However, CCRIF is always exploring new ways to meet the needs of Caribbean governments in an effort to enhance their disaster risk response and management capabilities by developing new products and services, often in collaboration with regional partners. After an intense period of development, CCRIF was able to offer the new excess rainfall product to Caribbean countries this year. Other new products being developed include new parametric products targeted at meeting the specific needs of low-income, vulnerable persons.

CCRIF's product developments for the 2012/13 policy year centred around the following three areas:

- **Excess Rainfall Product**
- **Climate Risk Adaptation and Insurance in the Caribbean Project**
- **Real-Time Forecasting System**

The progress on these areas is described below.

## EXCESS RAINFALL PRODUCT

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This year, CCRIF made its new Excess Rainfall (XSR) product available to CARICOM countries. This product was developed after CCRIF member countries and other Caribbean stakeholders expressed a strong interest in having coverage available for excess rainfall, both within hurricanes and in non-hurricane systems.

This parametric product was developed in collaboration with Swiss Re and is based on available NASA-processed satellite rainfall data. It has been designed as a rainfall hedge rather than to replicate actual losses from the various hazards related to heavy rainfall. Thus, it is a simpler product than the earthquake and tropical cyclone policies. With a view to improving the product, development continues on a more sophisticated rainfall modelling platform led by Kinetic Analysis Corporation (KAC) and supported by the Caribbean Institute for Meteorology and Hydrology (CIMH).

The excess rainfall product is triggered independently of the current Tropical Cyclone product, and if both policies trigger then two separate payouts would be due. The current hurricane policy is linked to wind and storm surge damage in a defined tropical cyclone. While the excess rainfall product can be triggered for a tropical cyclone, it can also be triggered in non-cyclonic systems if the rainfall trigger thresholds are met.

During this year, initial XSR models were created for current CCRIF member countries and work began on building models for the remaining CARICOM countries with an initial focus on Guyana. Each country that is interested in obtaining excess rainfall coverage must verify the model – and make adjustments where necessary – to ensure that the model is a reasonable representation of rainfall risk in that country.

Seven countries expressed strong interest in XSR coverage: Barbados, Jamaica, Saint Lucia, St. Kitts & Nevis, Trinidad & Tobago, Belize and Guyana. The CCRIF Team provided each of these countries with a country rainfall risk profile – based on the excess rainfall model – for review. The rainfall risk analysis, once agreed between CCRIF and each country, is used to structure and price different coverage options for the countries to examine and ultimately decide upon.



Coverage characteristics are selected by each country – in a similar way to the selection of coverage characteristics in the current tropical cyclone and earthquake products. The premium cost depends on the rainfall risk profile of the country and the coverage characteristics selected.

CCRIF will continue discussions with other countries in the region to explore their interest in the excess rainfall product.

## CLIMATE RISK ADAPTATION AND INSURANCE IN THE CARIBBEAN PROJECT

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The Climate Risk Adaptation and Insurance in the Caribbean Project is led by the Munich Climate Insurance Initiative (MCII) – hosted at the United Nations University Institute for Environment and Human Security (UNU-EHS). CCRIF, MicroEnsure and Munich Re are partnering with MCII in implementing the project and are providing technical and other support. Funding for the project has been provided by the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) under the International Climate Initiative (IKI).

The project is intended to help provide insurance to vulnerable people to strengthen their financial resiliency to extreme weather events. It seeks to address climate change, adaptation and vulnerability by promoting weather index-based insurance as a risk management instrument in the Caribbean through two specific products – the Livelihood Protection Policy (LPP) and the Loan Portfolio Cover (LPC). The LPP is a parametric insurance product available to low-income individuals for coverage against extreme weather events specifically, high winds and heavy rainfall, and the LPC is aimed at lending institutions such as credit unions and insurance companies.

Saint Lucia, Jamaica and Grenada are the first countries in the region to pilot these insurance products under this project – to be followed by Guyana and Belize. Discussions are taking place regarding expansion to yet other Caribbean countries.

Local ownership and involvement in the project has been critical. The products were developed after intensive consultation with stakeholders in each country, including representatives of agricultural agencies and cooperatives; ministries of agriculture, tourism and finance and various financial institutions – including credit unions. Regulators in each country have been involved in the approval process for the LPP and LPC and the LPP is being offered through local insurance companies – EC Global Insurance Co. Ltd. in Saint Lucia, Jamaica International Insurance Company in Jamaica and Trans-Nemwil Insurance Ltd. in Grenada. Also, the project team is conducting training sessions with prospective clients in each country.

The LPP was launched in Saint Lucia on May 29, 2013 and it is expected that it will be launched in Jamaica and Grenada by early 2014.



*Participants at the launch of the Livelihood Protection Policy on 29 May 2013 in Saint Lucia*

Because the LPP is “parametric”, it provides a payment when extreme rainfall or wind speed reaches pre-determined thresholds. If one of these thresholds is met, policyholders automatically receive payment within 10 days without having to file a claim. Furthermore, clients will be informed quickly if their individual policy was triggered through a short text

#### Livelihood Protection Policy (LPP)

Targeted at individuals, the LPP helps protect the livelihoods of vulnerable low-income individuals by providing swift cash payouts following extreme weather events (i.e. high winds and heavy rainfall). This crucial support will reduce poverty and vulnerability by enabling these persons to recover quickly following a disaster.

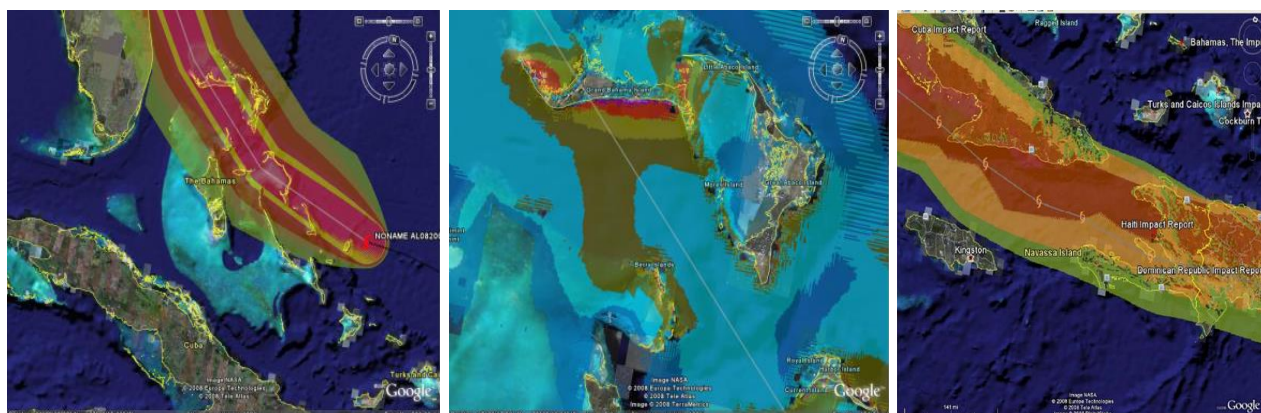
#### Loan Portfolio Cover (LPC)

Targeted at lending institutions, the LPC is a loan portfolio hedge that can help create a space of certainty for institutions with credit portfolios exposed to natural disaster risk. As loan portfolios are insured against climate risk, investment can reach areas previously considered too risky for traditional lending. In the short run, this creates a win-win situation for the lender and the borrower, while also contributing to economic development in the region in the long run.

message to their mobile phones. Beforehand, policy holders also will receive weather risk information such as storm warnings by text message. To support the LPP product, CCRIF will be providing wind data to the calculation agent and will be assuming an advisory role.

The LPC for financial institutions is well on its way to being finalised. CCRIF provided the technical expertise in designing the product in each of the target countries. CCRIF directly engaged with potential clients – including the Saint Lucia Development Bank and Development Bank of Jamaica – and analyzed their portfolios exposed to weather risk to produce insurance options tailored to the specific institution. Moving forward, CCRIF will be providing wind data to the calculation agent for the LPC and will be the sole insurer selling and managing the product in the Caribbean.

## REAL-TIME FORECASTING SYSTEM

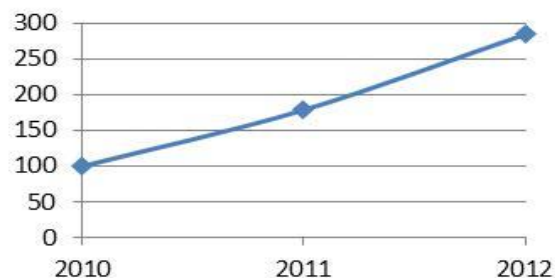


The Real-Time Forecasting System (RTFS) is a storm impact forecast tool which provides users with real-time hurricane hazard and impact information. The RTFS is made available at the beginning of the Atlantic Hurricane Season each year which starts on June 1 or when a storm becomes active within the designated CCRIF monitoring region. CCRIF will continue to provide this tool during the 2013 Atlantic Hurricane Season.

The RTFS provides information not available from other hurricane weather sources. While all hurricane weather sites tell the user where the storm is heading, and how strong it is likely to be, the CCRIF RTFS tells the user the impact the storm is likely to have when it gets there – in terms of: wind speed over land, storm surge and wave heights along the coast, total expected rainfall, number of people likely to be affected by wind speed category, expected general damage levels, and expected down-time for ports and airports.

### Access to the RTFS

During the 2012 Atlantic Hurricane Season, CCRIF created 103 new RTFS accounts, bringing to 281 the total number of persons with access to the RTFS. In 2011 and 2010, 179 and 100 users, respectively, had access to the system as shown in Figure 7.



**Figure 7: Number of persons with access to the RTFS**

Registered users included 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 disaster risk management. Additionally, in 2012, a significant number of new ministries and agencies such as ministries of agriculture, tourism and foreign affairs were provided access at their request.

### Training in the Use of the RTFS

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

The course was designed to enable users to better understand the information and data produced by the RTFS; the role the RTFS can play in decisions affecting expected hazard levels from storms and impacts on populations; and the RTFS in relation to other similar forecasting tools.

Forty-one persons from fifteen countries participated in the training. Seventy-eight persons participated in the training in 2011 – resulting in a **total of 119 participants in the training programme over the two years** (see table above at right). Of these participants, nine persons participated in the training course in both 2011 and 2012.

Country	# Training Participants 2011 & 2012
Anguilla	6
Antigua & Barbuda	13
Bahamas	5
Barbados	13
Belize	2
Cayman	3
Dominica	4
Grenada	13
Jamaica	12
Saint Lucia	4
St. Kitts & Nevis	5
St. Vincent & the Grenadines	7
Suriname	4
Trinidad & Tobago	26
Turks & Caicos Islands	2

Overall, all respondents rated the course as excellent or very good. They also indicated that overall the content of the course was very good, interesting, relevant and necessary.

Furthermore, **100% of respondents indicated that they would use the RTFS in the coming year.**

**RTFS Usage**

For the period June – November 2012, the RTFS page was viewed 231 times via 13 countries (see table at right), with Trinidad & Tobago using the site the most times, followed by Jamaica (46) and Haiti and Barbados (31). Non-CCRIF countries USA, UK and Italy accessed the site also. The table also shows the usage during Tropical Cyclones Ernesto, Isaac and Sandy.

Time period	# visits to RTFS site	# countries	Country with most visits
<b>June – Nov</b>	231	13	Trinidad & Tobago (63)
TC Ernesto	50	5	Trinidad & Tobago (22)
TC Isaac	62	7	Haiti (20)
TC Sandy	24	3	Jamaica (16)

# **PROGRAMMES, PROJECTS AND PARTNERSHIPS**



## PROGRAMMES, PROJECTS AND PARTNERSHIPS

Under Strategic Objective #2: “To enhance capacity for disaster risk management and climate change adaptation”, CCRIF supports its members in the development and implementation of strategies for disaster risk management and adaptation to climate change. CCRIF also ensures that its support for disaster risk management in the region builds on existing mechanisms, institutions, tools and capacities.

To enable the achievement of this strategic objective, CCRIF developed and began implementation in 2009 of a Technical Assistance Programme. This Programme consists of three components and is designed to provide an ongoing mechanism for grant support within the Caribbean region for capacity building initiatives and the development and implementation of projects which have a strong potential for improving the effectiveness of risk management. The Programme aims to help Caribbean countries deepen their understanding of natural hazards and catastrophe risk, and the potential impacts of climate change on the region. The three components are shown in Figure 8.

This section describes a special initiative to provide support to three CCRIF member countries which were affected by Hurricane Sandy in 2012. Also in this section, information is provided on other projects and programmes which the Facility is implementing such as the CCRIF/UWI and Extra-Regional Scholarship Programmes. An update on the various memoranda of understanding signed by the Facility is provided also.

### Scholarship/Prof. Dev. Programme

- Students across the region to benefit
- Scholarships for BSc and MSc programmes
- Continued professional development

### Regional ‘Strategic’ Knowledge Building

- Partnerships with regional institutions
- Funding for regional technical projects in natural hazards/risk science

### Support for Local DRM Initiatives

- Support for NDCs, NGOs and other community-based organisations in local hazard risk management and climate change initiatives

**Figure 8: Components of the CCRIF Technical Assistance Programme**

## CONTRIBUTIONS TO POST-HURRICANE SANDY RECOVERY

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Shortly after the passage of Hurricane Sandy in October 2012, CCRIF began to engage in discussions with three CCRIF member countries that had been affected by the hurricane – Jamaica, Haiti and The Bahamas – regarding possible support for recovery activities.

Small-scale, community-level projects in Jamaica, Haiti and The Bahamas were identified by key stakeholders in each country to receive assistance from CCRIF. This assistance was granted at the discretion of the CCRIF Board as humanitarian support and is described below.

### JAMAICA

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Based on discussions with Jamaica's Ministry of Finance and Planning, the Office of Disaster Preparedness and Emergency Management (ODPEM) and other stakeholders, CCRIF agreed to provide US\$100,000 to support the rehabilitation of two residential childcare facilities which were damaged by the hurricane – to be undertaken by Jamaica's Child Development Agency (CDA). On April 12, 2013, CCRIF signed a contribution agreement formalising this donation and the CDA is in the process of making the repairs, which should be complete by the end of 2013.





*Participating in the signing of the agreement for the grant for post-Sandy recovery, front row (L-R), Mr. Sydney Bartley, Acting Permanent Secretary, Ministry of Youth and Culture; Mr. Devon Rowe, Financial Secretary, Ministry of Finance and Planning; Mr. Isaac Anthony, CEO, CCRIF; Mr. Ken Blakeley, Board Member, CCRIF; back row (L-R), Mrs. Carla Francis-Edie, Chief Executive Officer, Child Development Agency; Mr. Ivan Carter, VP, Sagikor Jamaica, Insurance Manager, CCRIF; Dr. Simon Young, CEO, Caribbean Risk Managers, Facility Supervisor, CCRIF*

## HAITI

Following a review of appropriate post-Sandy disaster risk reduction projects compiled by UNOCHA, discussions were initiated with the Fondation Amour de Dieu (FADA), a humanitarian NGO in Haiti, and an agreement was reached to make a contribution of US\$115,000 towards a project focusing on soil conservation of flooded arable lands around the Bainet River. A draft grant agreement was shared in May 2013. The agreement will be signed and the funds transferred in June 2013. It is expected that the project will be complete by October 2013.



*Erosion of the Bainet River bank*

## THE BAHAMAS

In October 2012, CCRIF began discussions with the Ministry of Finance, the National Emergency Management Agency (NEMA) and the Ministry of Works and Urban Development and agreed to the Government's request to provide US\$85,000 for two projects to strengthen coastal defences damaged by Sandy: dune extensions at Sandypoint Beach Entrance and other locations, and repairs to Long Wharf Sidewalk. The grant agreement will be signed and the funds transferred early in the next fiscal year.

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## **SCHOLARSHIP/PROFESSIONAL DEVELOPMENT PROGRAMME**

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The CCRIF Scholarship and Professional Development Programme is a competitive programme that provides scholarships to students to attend UWI as well as institutions outside the Region and also provides assistance for Caribbean professionals to participate in important conferences and meetings that enable them to effectively carry out their responsibilities.

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### **CCRIF EXTRA-REGIONAL SCHOLARSHIP PROGRAMME**

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In 2011, CCRIF launched the extra-regional component of its scholarship programme. Through the extra-regional scholarship programme, CCRIF will provide up to two scholarships annually for eligible citizens of CARICOM member countries or CCRIF member countries wishing to obtain a Masters or MBA degree in areas related to catastrophe risk management at a university in the United Kingdom, United States or Canada.

Eligible programmes include Masters-level courses in the following areas which are not available at regional universities but which are available at universities in the United Kingdom/United States/Canada:

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

The first scholarships under this programme were awarded to two students for the 2012/13 year: Ms. Annlyn McPhie (from Grenada), to pursue a Masters in Public Administration degree in Environmental Science and Policy at Columbia University, USA and Mr. Mahendra Saywack (from Guyana), to complete a Master of Science degree in Climate Change and Development at the University of Sussex, UK. The value of these two scholarships totals US\$ 93,623.

The current year's application process began in March 2013 and the successful applicants will be selected in June 2013.

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### **CCRIF/UWI SCHOLARSHIP PROGRAMME**

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Through the CCRIF-UWI Scholarship Programme, CCRIF provides scholarships to undergraduate and post-graduate students who are pursuing study at the University in areas related to disaster management. For the 2012/2013 academic year, scholarships worth a total of US\$ 65,000 were provided to the students listed in Table 1 below.

**Table 1: Recipients of CCRIF-UWI Scholarships for 2012/2013**

Name	Degree Programme	Nationality
Tameka Claudius	MSc Disaster Management, Mona	Jamaica
Anna Hope Tucker	MSc Disaster Management, Mona	Jamaica
Rushelle Bennett	MSc Disaster Management, Mona	Jamaica
Carina Venetia Rouse	BSc Humanities and Education, Geography Mona (2 <sup>nd</sup> year)	St. Kitts & Nevis
Herona Thompson	BSc Science and Technology, Geography, Mona (2 <sup>nd</sup> year)	Jamaica
Julian Wilson	BSc Civil Engineering, St. Augustine (3 <sup>rd</sup> Year) – continuation of scholarship	Barbados
Kenton Gamble	BSc Civil Engineering, St. Augustine (3 <sup>rd</sup> Year) – continuation of scholarship	Barbados

Since the launch of the programme in 2010, the Facility has provided scholarships to a total of fourteen students at the Mona (Jamaica) and St. Augustine (Trinidad & Tobago) campuses of the University. The total value of awards disbursed to date is US\$154,250.

Currently, CCRIF and UWI are in discussion regarding a number of issues including expanding the CCRIF-UWI Scholarship Programme to offer scholarships in additional programmes and across all three campuses of the University.

CCRIF and UWI have agreed to develop a Memorandum of Understanding which will outline the framework for the enhanced administration and management of the CCRIF-UWI Scholarship Programme.



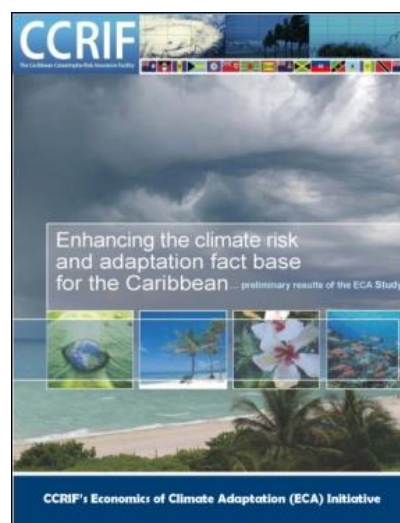
*CCRIF CEO, Mr. Isaac Anthony (2<sup>nd</sup> right), paid a courtesy visit on UWI Registrar, Mr. Clement Iton (1<sup>st</sup> left) in January and had the opportunity of meeting two of CCRIF's scholarship recipients for 2012/13, Herona Thompson (3<sup>rd</sup> left) from Jamaica and Carina Rouse (1<sup>st</sup> right) from Anguilla, both reading for Geography degrees at the Mona Campus. Also in the photo is Dr. Angella Stephens (2<sup>nd</sup> left) from the UWI undergraduate scholarship department*

## SCHOLARSHIP SUPPORT TO THE GOVERNMENT OF BELIZE

CCRIF provided second-year scholarships to Ms. Michele Natalie Smith and Ms. Shanea Latoya Young of the National Meteorological Service of Belize upon being informed of their satisfactory completion of Year 1 of their course work for a Bachelor of Science degree in Meteorology at the University of West Indies, Cave Hill Campus, Barbados. This support to the Government of Belize was granted by CCRIF under its Technical Assistance Programme after the passage of Tropical Cyclone Richard in 2010 and was intended to fill a capacity gap caused by recent retirement of experienced professionals from the Meteorological Service.

## ECONOMICS OF CLIMATE ADAPTATION (ECA) INITIATIVE

In 2010 CCRIF released the preliminary results of its study on the Economics of Climate Adaptation (ECA) in the Caribbean conducted in eight Caribbean countries: Anguilla, Antigua & Barbuda, Barbados, Bermuda, the Cayman Islands, Dominica, Jamaica and Saint Lucia. The study was welcomed by Caribbean countries which realise that climate change has the potential to greatly exacerbate their risks from hurricanes and storms. Findings from the study indicated that annual expected losses from wind, storm surge and inland flooding already amount to up to 6% of GDP in some countries and that, in a worst case scenario, climate change has the potential to increase these expected losses by 1 to 3 percentage points of GDP by 2030.



Since the completion of this first phase, CCRIF has been in dialogue with international development partners about confirming the preliminary results for the eight pilot countries and expanding this methodology to other Caribbean states.

During this year, CCRIF conducted discussions with the Inter-American Development Bank (IDB) about expanding the ECA study, utilising CCRIF's experience and data/modelling technology to assist in completing an ECA study for Trinidad & Tobago and building on the 2010 ECA study.

In January of this year IDB and CCRIF signed an MoU to develop and embed the ECA methodology in the Caribbean, to collaborate in the development of ECA studies that would provide a decision making tool for country and regional decision makers across the region and to support IDB's access to CCRIF's risk analysis model for the ECA methodology, which is a core element of the ECA programme.

Thus, the framework methodology and the knowledge generated will be transferred to risk and cost-benefit practitioners in Trinidad & Tobago and also throughout the Caribbean region in order to ensure sustainability and homogeneity of the approach to assessing the costs of climate adaptation.

## **PARTNERSHIPS AND STRATEGIC ALLIANCES**

As part of its programme of activities, CCRIF continues to develop and strengthen partnerships with key entities in the region through the development of MoUs and collaborative programmes to improve disaster risk management, increase climate resilience and reduce vulnerabilities in the Caribbean.

As described above, CCRIF signed an MoU with the IDB to develop a framework to expand the Economics of Climate Adaptation methodology throughout the Caribbean region.

Also this year, CCRIF made progress towards developing an MoU with the University of the West Indies regarding the CCRIF/UWI Scholarship Programme described earlier in this section.

In May 2013, CCRIF met with the President of the Institution of Structural Engineers (IStructE), Mr. Y. K. Cheng. The Facility supported IStructE Caribbean Group's annual conferences in 2010 and 2011 and the Institution expressed interest in exploring a partnership with CCRIF that would work towards improving the standard of construction throughout the region. This partnership would explore methods of improving the building codes through the use of CCRIF's modelling platform which could assist with quantifying the benefits of full implementation of codes.

## **MEMORANDA OF UNDERSTANDING**

At this time, CCRIF has MoUs with seven organisations:

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

Progress made with respect to our partnerships with other key organisations in the region over the last year is described in Table 2. During this time, CCRIF worked with partner organisations to develop detailed work plans to facilitate the timely implementation of the MoUs.



**Table 2: Progress of MoUs in the 2012/2013 Policy Year**

Partner	Progress in 2012/13 Policy Year
<p><b>CCCCC</b> Caribbean Community Climate Change Centre</p>	<ul style="list-style-type: none"> <li>Development of the work plan began and one of the main areas of focus was the incorporation of the Economics of Climate Adaptation work being done in Trinidad &amp; Tobago by the Inter-American Development Bank.</li> </ul>
<p><b>CDEMA</b> Caribbean Disaster Emergency Management Agency</p>	<ul style="list-style-type: none"> <li>As part of CCRIF’s commitment under its MoU with CDEMA, CCRIF provided sponsorship to the 7<sup>th</sup> Caribbean Conference on Comprehensive Disaster Management. Co-hosted by CDEMA and Jamaica’s Office of Disaster Preparedness and Emergency Management, the conference was held in Montego Bay in December 2012.</li> <li>Discussions were initiated to revise the existing MoU to expand the scope of activities governed by the agreement.</li> </ul>
<p><b>CIMH</b> Caribbean Institute for Meteorology and Hydrology</p>	<ul style="list-style-type: none"> <li>CIMH continued to support CCRIF in providing real-time hurricane hazard forecasts through the RTFS for all member governments during the 2012 Atlantic Hurricane Season. CIMH collaborated with CCRIF and KAC to deliver online training on the RTFS to Caribbean nationals in the meteorological and disaster management sectors.</li> </ul>
<p><b>OECS</b> Organisation of Eastern Caribbean States</p>	<ul style="list-style-type: none"> <li>The OECS Secretariat work plan was finalised and the main activities for 2012-2013 included building capacity of key stakeholders within OCES countries in the use of the CCRIF RTFS; identification and prioritisation of vulnerable communities and subsequent development of community disaster risk reduction action plans; and building capacity in understanding the risks faced by OECS countries and development of country risk officers.</li> </ul>

Partner	Progress in 2012/13 Policy Year
<p><b>UNECLAC</b> UN Economic Commission for Latin America and the Caribbean</p>	<ul style="list-style-type: none"> <li>The UNECLAC work plan was finalised and the main activities for 2012-2013 included an evaluation of post-disaster assessments which will include an assessment of the region’s resilience and risk reduction initiatives; and an assessment of strategies for linking of ECLAC’s Damage and Loss Assessment methodology to the Post Disaster Needs Assessment as a means of strengthening both approaches.</li> </ul>
<p><b>UWI SRC</b> University of the West Indies Seismic Research Centre</p>	<ul style="list-style-type: none"> <li>The overall objective of this MoU is to underpin CCRIF support for the expansion of a core network of strong motion instruments over a period of two years. The first accelerometer was deployed in the Information Technology building of the UWI Cave Hill Campus, Barbados and discussions were held regarding hosting the second Barbados installation. A team of engineers visited Saint Lucia to establish a Broadband/Strong Motion monitoring station at Bisee in the suburbs of Castries. The team also used the opportunity to: make final selection of the Dennery site – at the Bordelais Correctional Facilities; perform the requisite civil engineering works to prepare the site for a six-channel (seismometer and accelerometer) installation; and conduct reconnaissance at three sites in the Castries area: the Port, the Hospital and UWI Open Campus. Deployment of stations in St. Kitts &amp; Nevis, Antigua and Jamaica will take place later in 2013.</li> </ul>

## COLLABORATION WITH INTERNATIONAL DEVELOPMENT PARTNERS AND REGIONAL FINANCE INSTITUTIONS

### CCRIF – CDB Strategic Donor Meeting

The CDB and CCRIF hosted a strategic donor meeting at the offices of the CDB in Barbados on March 6, 2013 to discuss potential donor support to enable Caribbean countries at risk from extreme rainfall to take advantage of CCRIF’s new excess rainfall product and to coordinate with donors’ disaster risk management initiatives in the region.



The meeting brought together international development partners including the UK Department for International Development, United Nations Development Programme, Canadian International Development Agency, Inter-American Development Bank and the European Union among others. Regional institutions represented included the Caribbean Institute for Meteorology and Hydrology, Caribbean Disaster and Emergency Management Agency and the Caribbean Community Climate Change Centre. Other participants included

His Excellency Ambassador Appio Claudio Muniz Acquarone of Brazil and Mr. Yu Bu, Alternate Director for China to CDB and First Secretary of the People's Republic of China to Barbados.



*The meeting brought together international development partners as well as representatives of regional organisations.*

### **Other Meetings**

CCRIF engaged in a range of other discussions with development partners and institutions to access funding for the further development of CCRIF products – especially the excess rainfall product – as well as initiatives such as the Economics of Climate Adaptation Project. Notable among these meetings were a meeting with the International Monetary Fund (IMF) Caribbean team and a Commonwealth and Francophonie Outreach event with the IMF's G20 Development Working Group to explore ways of assisting member countries with budgeting and financing their premiums.



# **COMMUNICATIONS, PUBLICATIONS AND PUBLIC RELATIONS**



# COMMUNICATIONS, PUBLICATIONS AND PUBLIC RELATIONS

CCRIF’s Strategic Objective 4, “To deepen understanding and knowledge of catastrophe risk and the solutions CCRIF provides” focuses on facilitating and promoting informed decision making through communications and capacity development programmes and activities directed to its members, key stakeholders, policy makers and the general public.

The focus for 2012-2013 was on provision of materials to members to facilitate better understanding of CCRIF, timely reporting of CCRIF activities to stakeholders, maintenance and expansion of the capabilities of the CCRIF website to meet stakeholder needs, communication with the media and contribution to key regional and international events and publications related to disaster risk management and climate change.

## CCRIF PUBLICATIONS AND PR

Over the policy year, CCRIF produced 15 publications including quarterly and annual reports, newsletters and a booklet on the new excess rainfall product: “A Guide to Understanding the CCRIF/Swiss Re Excess Rainfall Product”. All CCRIF publications are available on the CCRIF website.



CCRIF’s activities and the CCRIF model are regularly featured in various publications prepared by a range of stakeholders. During the policy year, CCRIF was included in publications and reports prepared by organisations including the World Bank, Swiss Re Centre for Global Dialogue, International Labor Organization/Munich-Re Foundation and Barbados’ Department of Emergency Management.

During the period June 1, 2012 to May 31, 2013, 172 articles on CCRIF were published. Part of this coverage was as a result of press releases disseminated by CCRIF and from requests by journalists for information and interviews. Other articles appeared due to growing recognition among the insurance and Caribbean media of CCRIF’s positive contribution to disaster risk management and climate adaptation in the Caribbean and its role as an example which can be adapted to other parts of the world.

## Regional Risk Insurance Model May Be Adopted Globally

The Caribbean Catastrophe Risk Insurance Facility may be adopted at a global level if suggestions put forward at the United Nations Framework Convention on Climate Change (UNFCCC) Expert Meeting are accepted.

During the three-day meeting held last week at Hilton Barbados the issue of Loss and Damage Associated with the Adverse Effects of Climate Change took centre stage.

And in delivering the keynote address during the opening ceremony, **UNFCCC Executive Secretary Christiana Figueres** noted that the Caribbean was the only region in the world with such a regional insurance system.

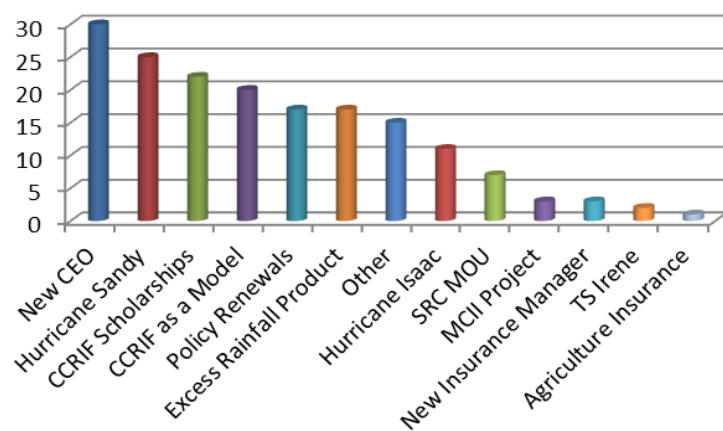
*“It is quite unique and is looked upon by other countries as a potential lesson learnt to see what can be extrapolated. What is being thought through here in this meeting and needs to go to Doha for further consideration is what insurance mechanisms can be set up at the global level to give the first level of insurance,”* she said.

- BGIS Media, 10 October 2012

Evidence of growing interest in CCRIF was demonstrated by an increase in coverage this year: the number of articles during 2012-2013 increased by 60% compared with the previous year which saw 108 articles that referenced CCRIF being published.

Figure 9 shows the frequency of articles by topic area that appeared in the international and regional press.

Caribbean printed and online newspapers or news outlets accounted for almost 40% of all coverage while UK and US sources (primarily insurance and finance journals) accounted for another 20%. The remaining 20% of CCRIF articles appeared on websites of Caribbean and international organisations such as CDEMA, OECS, the governments of Saint Lucia and the Turks and Caicos Islands, ReliefWeb and PreventionWeb.



**Figure 9: Press coverage (# articles) by topic**

## RECOGNITION AND AWARDS

In *Best's Review January 2013 Innovative Showcase*, CCRIF was recognised for **“good innovative/non-traditional approach to reinsurance for emerging/economically challenged countries.”**



The Innovation Showcase is a forum for “forward-thinking initiatives that are providing insurance organizations with measurable success”. Reviewer, Dianne Batistoni – Partner, Financial Services-Insurance Group Eisner Amper – said, **“The CCRIF’s ability to turn around payments in less than a month for eight separate cat claims since its inception in 2007 makes it a truly valuable and unique solution.”**

In March 2013, CCRIF was selected to receive the **Captive Insurance Companies Association’s (CICA’s) Outstanding Captive Award**. This annual award recognizes a successful captive insurance company that has shown creative uses for a captive, prevailed in difficult times, and has gained a positive reputation among rating agencies, regulators, and colleagues in the captive industry.



**Mr. Milo Pearson (right), Chairman of CCRIF receiving the 2013 Outstanding Captive of the Year Award on behalf of CCRIF at the Captive Insurance Companies Association’s (CICA’s) International Conference in California in March 2013. The award was presented by the CICA Board’s Immediate Past Chairman, Mr. Dirk Heim (centre), of Sierra Land Group, Inc., Glendale. Also pictured is Mr. James Rawcliffe (left), Vice President of Sagikor Insurance Managers Limited, CCRIF’s Insurance Manager.**

**Dr. Wm. Warren Smith, President of the Caribbean Development Bank (CDB)** delivered an address entitled “Imperatives for Securing Our Caribbean Future” at the 43<sup>rd</sup> Annual Meeting of the Board of Governors held in Saint Lucia on May 22 & 23, 2013. He recommended CCRIF as an important component of the region’s climate adaptation and disaster management strategies.



We know from bitter experience that even the most carefully crafted fiscal adjustment programme can be quickly derailed by a major climate event. Buying adequate insurance cover offers an efficient way of transferring some of this risk. The Caribbean Catastrophe Risk Insurance Facility (CCRIF) is an excellent vehicle for this purpose. ...

The CCRIF is ideally placed to provide two practical forms of such support to Caribbean countries pursuing broad-based reforms. Firstly, for the duration of the period of fiscal adjustment, say four years, Donor assistance could be provided to these countries to increase the level of their catastrophic insurance cover to a more acceptable level. Secondly, the recent request by the CCRIF for a new injection of Donor funds to enhance the affordability of its new flood insurance product would open up yet another window for transferring some of the risk associated with flooding, which is now an almost annual event in the Caribbean.

*- Dr. Wm. Warren Smith, CDB President*

**US Vice President Joe Biden** visited Trinidad & Tobago on May 27, 2013 and met with President Anthony Carmona and Prime Minister Kamla Persad-Bissessar as well as a number of other Caribbean leaders. Vice President Biden referenced CCRIF during discussions which focused on regional efforts to promote economic growth, and citizen security and energy.

“You’ve already created, Mr. President, an initiative and an innovative model for regional cooperation by pooling risks to respond to natural disasters. And therefore I think that the whole region is better equipped in the future to deal with these pending problems”.

*- US Vice President Joe Biden*

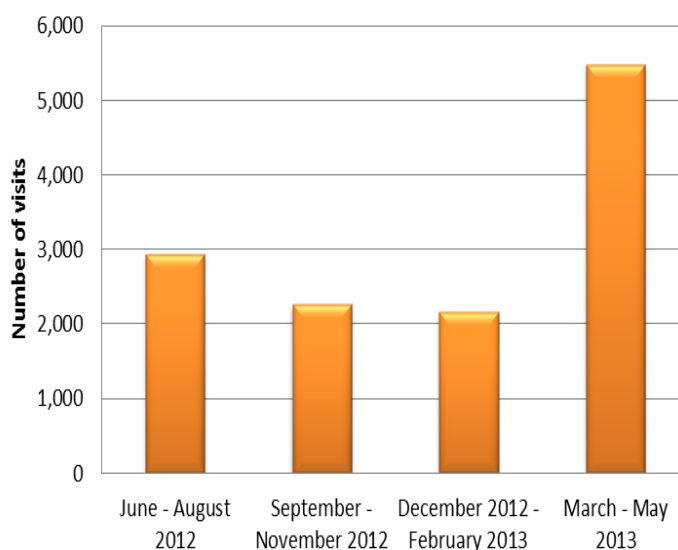


## CCRIF WEBSITE



During the policy year additions were made to the website to enhance its capability and to make it more user-friendly. The 2013 extra-regional scholarship applications were processed via a special section of the CCRIF website dedicated to this purpose and a new section, “RTFS FAQs” was added to answer questions raised by participants in the RTFS training sessions.

During this year, the CCRIF website was accessed 12,859 times (approximately the same as last policy year when it was accessed 12,232 times). Figure 10 shows the access to the CCRIF website for each quarter during this policy year. The large number of visits in the final quarter is a reflection of the number of visits to the extra-regional scholarships webpage – the scholarships were announced in March 2013 and the deadline was in April.



**Figure 10: Visits to CCRIF website by quarter for FY 2012-2013**

## CONFERENCES AND FORA

During this policy year, CCRIF and CDB hosted a strategic donor meeting (described in the section on Partnerships and Strategic Alliances above) and CCRIF supported the 7<sup>th</sup> Annual Caribbean Conference on Comprehensive Disaster Management (CDM).



CCRIF provided US\$25,000 to support the CDM conference, hosted by CDEMA in collaboration with Jamaica’s Office of Disaster Preparedness and Emergency Management, held December 3-7, 2012 in Montego Bay, Jamaica. CCRIF’s support included hosting a session entitled “Risk Financing and Insurance for Disaster Resilience”. Discussions focused on CCRIF as a viable option for the Caribbean as well as risk transfer in the tourism and agriculture sectors and the microinsurance products being developed under the Climate Risk Adaptation and Insurance in the Caribbean Project.

Members of the CCRIF Board and Team participated in over twenty conferences, meetings and workshops. Many of these events were related to climate change – the CCRIF model is seen as a viable case study for climate change adaptation and countries all over the world are interested in learning from CCRIF’s experience.

Key meetings related to climate change included a United Nations Framework Convention on Climate Change (UNFCCC) regional expert meeting on loss and damage, a forum on finance and risk management in the context of climate change hosted by UNECLAC and the Council of Ministers of Finance of Central America, Panama and Dominican Republic (COSEFIN), a UNFCCC Negotiation Strategy Meeting hosted by the Alliance of Small Island States (AOSIS), and a workshop on climate risk insurance hosted by MCII and the German Association for International Cooperation (GIZ).

**AUDITED  
FINANCIAL STATEMENTS 2012/13**





**CARIBBEAN CATASTROPHE RISK INSURANCE FACILITY**

**CONSOLIDATED FINANCIAL STATEMENTS**

**FOR THE YEAR ENDED MAY 31, 2013 AND 2012**

**CARIBBEAN CATASTROPHE RISK INSURANCE FACILITY**

**CONSOLIDATED FINANCIAL STATEMENTS**

**FOR THE YEAR ENDED MAY 31, 2013 AND 2012**

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## INDEPENDENT AUDITOR'S REPORT

### **To the Board of Directors and Shareholders of Caribbean Catastrophe Risk Insurance Facility**

We have audited the accompanying consolidated financial statements of Caribbean Catastrophe Risk Insurance Facility and its subsidiary (the "Group"), which comprise the consolidated balance sheets as of May 31, 2013 and 2012, and the related consolidated statements of income, of changes in shareholder's equity and of cash flows for the years then ended.

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

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of consolidated 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 the consolidated financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the Group's preparation and fair presentation of the consolidated 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 Group's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the consolidated 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 consolidated financial statements referred to above present fairly, in all material respects, the financial position of Caribbean Catastrophe Risk Insurance Facility and its subsidiary at May 31, 2013 and 2012, and the results of their operations and their cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

A handwritten signature in cursive script that reads "PricewaterhouseCoopers".

August 22, 2013

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

**CARIBBEAN CATASTROPHE RISK INSURANCE FACILITY**

**CONSOLIDATED BALANCE SHEETS**

(expressed in U.S. dollars)

	<u>2013</u>	<u>May 31,</u> <u>2012</u>
<b>ASSETS</b>		
Cash and cash equivalents (Note 4)	\$ 2,005,966	\$ 12,691,997
Investments, at fair value (Cost \$117,101,187 (2012: \$101,359,161)) (Note 5)	119,929,065	103,505,694
Unrealized gains on forward contracts (Note 10)	449,465	628,868
Due from broker (Note 19)	915,768	-
Development costs (Note 17)	300,585	341,260
Accrued interest	1,181,008	1,167,330
Prepaid expenses	218,863	21,004
Amounts due from Donor Funds (Note 6)	<u>68,802</u>	<u>100,618</u>
 Total assets	 <u>\$ 125,069,522</u>	 <u>\$ 118,456,771</u>
 <b>LIABILITIES AND SHAREHOLDER'S EQUITY</b>		
<b>Liabilities</b>		
Accounts payable and accrued expenses (Note 7)	\$ 563,404	\$ 440,253
Due to broker (Note 19)	-	15,102
Income from parametric contracts received in advance (Note 8)	600,000	1,487,500
Participation fee deposits (Note 9)	14,549,716	15,858,512
	<u>15,713,120</u>	<u>17,801,367</u>
 Total liabilities	 <u>15,713,120</u>	 <u>17,801,367</u>
 <b>Shareholder's equity</b>		
Share capital (Note 11)	1,000	1,000
Share premium (Note 11)	119,000	119,000
Special reserve (Note 11)	5,068,170	5,010,878
Technical assistance reserve (Note 11)	370,455	846,617
Retained earnings	<u>103,797,777</u>	<u>94,677,909</u>
 Total shareholder's equity	 <u>109,356,402</u>	 <u>100,655,404</u>
 Total liabilities and shareholder's equity	 <u>\$ 125,069,522</u>	 <u>\$ 118,456,771</u>

Approved for issuance on behalf of the Board of Directors of Caribbean Catastrophe Risk Insurance Facility by:

Milo Pearson

August 22, 2013

\_\_\_\_\_  
Director

\_\_\_\_\_  
Date

Desirée Cherebin

August 22, 2013

\_\_\_\_\_  
Director

\_\_\_\_\_  
Date

The accompanying notes are an integral part of these consolidated financial statements.

**CARIBBEAN CATASTROPHE RISK INSURANCE FACILITY**

**CONSOLIDATED STATEMENTS OF INCOME**

*(expressed in U.S. dollars)*

	<u>2013</u>	Year ended <u>May 31,</u>	<u>2012</u>
<b>Operating income</b>			
Income from parametric contracts (Note 2)	\$ 20,272,680		\$ 20,043,512
Discounts awarded on parametric contracts (Note 2 & 11)	( 5,010,878)		-
Expenses on parametric reinsurance contracts (Note 2)	( 10,400,000)		( 10,049,295)
Net income on parametric contracts	4,861,802		9,994,217
Ceding commissions on parametric reinsurance contracts	<u>417,500</u>		<u>393,530</u>
Total operating income	<u>5,279,302</u>		<u>10,387,747</u>
<b>Operating expenses</b>			
Claims paid on parametric contracts (Note 12)	-		-
Brokerage and facility supervisor fees	<u>863,777</u>		<u>852,008</u>
Total operating expenses	<u>863,777</u>		<u>852,008</u>
Net operating income/(loss)	4,415,525		9,535,739
<b>Other income and expenses</b>			
Investment income (Note 13)	6,112,478		1,356,559
Income from Donor Funds (Note 6)	354,709		756,594
Amortization of development costs (Note 17)	( 205,540)		( 95,630)
Technical assistance expenses (Note 3)	( 476,162)		( 463,186)
Contribution to Relief Efforts	( 300,305)		-
Administrative expenses (Notes 14 and 15)	( 1,199,707)		( 1,075,739)
Net income for the year	<u>\$ 8,700,998</u>		<u>\$ 10,014,337</u>

The accompanying notes are an integral part of these consolidated financial statements.

**CARIBBEAN CATASTROPHE RISK INSURANCE FACILITY**

**CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDER'S EQUITY**

*(expressed in U.S. dollars)*

	<u>Share Capital</u>	<u>Share premium</u>	<u>Special reserve</u>	<u>Technical assistance reserve</u>	<u>Retained earnings</u>	<u>Total</u>
Balance at May 31, 2011	1,000	119,000	-	709,803	89,811,264	90,641,067
Transfer to reserves	-	-	5,010,878	600,000	( 5,610,878)	-
Net income for the year	-	-	-	-	10,014,337	10,014,337
Utilization of reserves	-	-	-	( 463,186)	463,186	-
Balance at May 31, 2012	1,000	119,000	5,010,878	846,617	94,677,909	100,655,404
Transfer to reserves	-	-	5,068,170	-	( 5,068,170)	-
Net income for the year	-	-	-	-	8,700,998	8,700,998
Utilization of reserves	-	-	( 5,010,878)	( 476,162)	5,487,040	-
Balance at May 31, 2013	<u>\$ 1,000</u>	<u>\$ 119,000</u>	<u>\$ 5,068,170</u>	<u>\$ 370,455</u>	<u>\$ 103,797,777</u>	<u>\$ 109,356,402</u>

The accompanying notes are an integral part of these consolidated financial statements.

**CARIBBEAN CATASTROPHE RISK INSURANCE FACILITY**

**CONSOLIDATED STATEMENTS OF CASH FLOWS**

*(expressed in U.S. dollars)*

	<u>2013</u>	Year ended <u>May 31,</u>	<u>2012</u>
<b>Operating activities</b>			
Net income for the year	\$ 8,700,998		\$ 10,014,337
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*	( 1,308,796)		( 3,465,000)
Change in fair value of investments	( 681,345)		2,603,816
Net realized (gain)/loss on investments	( 2,782,257)		1,590,430
Unrealized gains on derivative instruments	179,403		( 692,675)
Amortization of development cost	205,540		95,630
Trading Securities:			
Purchase of securities	(105,000,831)		( 94,617,169)
Proceeds from sale of securities	91,025,114		90,404,925
Net movement in short term investments	1,015,948		1,957,669
Due from/to Broker	( 930,870)		( 1,805,493)
Changes in assets and liabilities:			
Accrued interest	( 13,678)		186,001
Amounts due from Donor Funds	31,816		4,465,557
Accounts payable	123,151		64,648
Income from parametric contracts received in advance	( 887,500)		( 62,500)
Prepaid expenses	<u>( 197,859)</u>		<u>142,465</u>
Net cash (used) / generated in operating activities	<u>( 10,521,165)</u>		<u>10,882,641</u>
<b>Investing activities</b>			
Development Cost	<u>( 164,865)</u>		<u>( 47,850)</u>
Net cash used in investing activities	<u>( 164,865)</u>		<u>( 47,850)</u>
<b>Net change in cash and cash equivalents</b>	( 10,686,031)		10,834,791
<b>Cash and cash equivalents at the beginning of year</b>	<u>12,691,997</u>		<u>1,857,206</u>
<b>Cash and cash equivalents at the end of year</b>	<u>\$ 2,005,966</u>		<u>\$ 12,691,997</u>
Interest and dividends received	<u>\$ 4,182,190</u>		<u>\$ 3,541,197</u>

\*Non-cash decrease in participation fee deposits offset against income recoverable from Parametric contracts (Note 9).

The accompanying notes are an integral part of these consolidated financial statements.

## **CARIBBEAN CATASTROPHE RISK INSURANCE FACILITY**

### **NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

#### **FOR THE YEAR ENDED MAY 31, 2013 AND 2012**

*(Expressed in United States dollars)*

#### **1. Incorporation and principal activity**

Caribbean Catastrophe Risk Insurance Facility, Ltd. (the “Company”) was incorporated 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. The Company’s sole shareholder is the CCRIF Star Trust (the “Trust”). The Trustees of the Trust are based in the Cayman Islands.

The principal activity of the Company is to provide catastrophe risk coverage through parametric contracts, specifically relating to tropical cyclones and earthquakes (“Acts of Nature”), to certain Caribbean countries (“Participating Countries”).

The Company also owns all of the beneficial interests in the Global Managed (7) \$ Fund (the “Investment Fund” or “Subsidiary”) (a Segregated Portfolio of London & Capital Satellites SPC). Accordingly, the Company consolidates the results of the Investment Fund within these financial statements. The purpose of the Investment Fund is to conduct part of the investment activities of the Company. The Company and the Investment Fund are collectively referred to as “the Group” in these consolidated financial statements.

#### **2. Parametric contracts**

The principal activity of the Group is to provide catastrophe risk coverage to governments of Participating Countries, through parametric contracts, specifically relating to defined Acts of Nature that occur in or in close proximity of the Participating Countries.

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 Acts of Nature within the defined policy parameters. For the 2012/13 policy year (which terminated on May 31, 2013), the combined aggregate coverage limits for all Participating Countries were \$372 million (2012: \$371 million) for tropical cyclones events and \$254 million (2012: \$253 million) for earthquake events, respectively.

The Group has ceded layers of this exposure to commercial reinsurers and the International Bank for Reconstruction and Development (“World Bank”). The following is a summary of the coverage in the program for the period up to May 31, 2013 and 2012:

- The Group retains all losses up to \$ 25 million (2012: \$25 million) per annum.
- 100% (2012: 100%) of the next \$5 million (2012: \$5 million) of losses are reinsured with 8 (2012: 6) reinsurers with an A.M.Best rating of at least A for 8 of the reinsurers. The Group retains Nil % (2012: Nil%) of losses in this layer.
- 100 % (2012: 100%) of the next \$35 million (2012: \$35 million) of losses are reinsured with 8 (2012: 6) reinsurers with an A.M.Best rating of at least A for 8 of the reinsurers. The Group retains Nil % (2012: Nil%) of losses in this layer.
- The next \$80 million (2012: \$85 million) of losses are ceded 62.50% to 8 (2012: 64.71% to 6) commercial reinsurers with an A.M.Best rating of at least A for 8 of the reinsurers, and 37.50 % (2012: 35.29 %) to the World Bank.
- The Group retains all subsequent losses above \$145 million (2012: \$150 million).



**CARIBBEAN CATASTROPHE RISK INSURANCE FACILITY**  
**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
**FOR THE YEAR ENDED MAY 31, 2013 AND 2012**

*(Expressed in United States dollars)*

**2. Parametric contracts (continued)**

Notwithstanding the arrangements outlined above, all losses incurred in the Group's retention limits were reimbursed to the Group by the Multi Donor Trust Fund up until exhaustion of the funds available which occurred during the year ended May 31, 2012 (see Note 6).

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, 2013 and 2012, there were no unpaid losses.

**3. Significant accounting policies**

These consolidated financial statements 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 consolidated financial statements is as follows:

**Basis of Preparation:** The financial position, results of operations and cash flows of the Company and Subsidiary have been included in these consolidated financial statements. All material balances and transactions (and related gains/losses) between the Company and the Subsidiary have been eliminated upon consolidation.

**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 the Group's banker and investment custodians, and fixed deposits with original maturities of three months or less., recorded at amortised cost.

**Investments:** Investments consist of investments in exchange-traded funds, retail mutual funds, corporate debt securities, sovereign debt securities and short-term investments. The Company trades these investment securities with the objective of generating profits on short-term differences in market prices, accordingly, the Group classifies its investments as trading securities.

The fair value of exchange-traded funds is based on quoted market prices. The fair value of fixed income securities are determined based on quoted market prices and prices determined using generally accepted pricing models as provided by the Group's 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 Consolidated Statements of Income. Realized gains and losses on investments are determined on the specific identification method and are credited or charged to the Consolidated Statement of Income.

Interest and dividend income is recorded on the accruals basis.

**CARIBBEAN CATASTROPHE RISK INSURANCE FACILITY**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

**FOR THE YEAR ENDED MAY 31, 2013 AND 2012**

*(Expressed in United States dollars)*

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

**Forward and futures contracts:** The Group permits its investment managers 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, the Group records a realized gain or loss equal to the difference between the proceeds from (or cost of) the closing transaction and the Group’s basis in the contracts. Futures contracts are valued based on exchange traded prices.

The Group also permits its investment managers 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 2 and Level 1 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 Consolidated Statements of Income.

**Credit default swaps (“CDSs”) and over-the-counter (“OTC”) options:** The Group permits its investment managers to enter into CDSs to manage its exposure to the market or certain sectors of the market, to hedge or obtain exposure to or protection from defaults of underlying debt instruments. OTC options are purchased or written to hedge against or obtain exposure to changes in the value of equities. CDSs and 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. Net realized gains or losses are recorded with respect to periodic interest payments made or received on CDSs. Movement in unrealized gains and losses on CDSs and OTC options are recorded as a component of investment income in the consolidated statements of income. Open CDSs and OTC options are valued using Level 2 inputs (as defined in the fair value measurements accounting policy below).

**Other Options and Warrants:** The Group permits its investment managers 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 by the Group 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 the Group has realized a gain or loss on derivative contracts. If a purchased call option or warrant is exercised, the premium increases the cost basis of the security, foreign currency or commodity purchased by the Group. Movement in unrealized gains and losses on other options and warrants are recorded as a component of investment income in the consolidated statements of income. Open options and warrants are valued using Level 2 inputs (as defined in the fair value measurements accounting policy below).

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

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

- Level 1      Inputs that reflect unadjusted quoted prices in active markets for identical assets or liabilities that the Group 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. The Group uses the Net Asset Values (“NAV”) to estimate the fair value of its 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 Group’s 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 revalued 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, certain U.S. government and sovereign obligations, exchange-traded funds and certain short-term, investments. The investment manager does not adjust the quoted price for such instruments.

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

None of the Group’s investments are classified within level 3.

**Income from Donor Funds:** In accordance with the agreements described in Note 6, the Group record income from Donor Funds on an accruals basis when costs reimbursable under the grant agreements were incurred and for which the Company was reimbursed.

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

**Income and expenses from parametric contracts:** Amounts payable/receivable for claims under the parametric policies written and ceded by the Group 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 consolidated 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, 2013 and 2012, 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/expenses in the consolidated statements of income.

**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 9); and/or
- they are required to fund losses (see Note 9)

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 Consolidated Statement of Income 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 the Group to determine whether an income tax position of the Group 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 Group's financial statements.

**Technical assistance reserve:** Effective June 1, 2010, the Group commenced appropriating retained earnings to the technical assistance reserve. The amount to be credited to the reserve is established by the Company's Board of Directors based on a discretionary percentage applied to the prior year's investment income. The Company's Board of Directors has the discretion to eliminate or modify the basis of the appropriation in the future if it deems appropriate. The reserve was set up to fund special research projects such as the economic climate adaptation projects, scholarships in the field of climatology, certain marketing activities and ad-hoc donations. When expenses deemed to be "technical assistance" are approved by the Company's board and are incurred, a corresponding amount is transferred to retained earnings from the Technical Assistance reserve.

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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, 2013 and 2012, no receivables were determined to be past due or impaired and, accordingly, no provision for doubtful collection has been established.

**Special reserve:** Special reserve represents an appropriation from retained earnings as determined by the Directors. This reserve will, at the sole discretion of the Directors, be released to retained earnings if and when premium discounts are granted to Participating Countries under the parametric contracts issued by the Company for the subsequent underwriting year. When such discounts are applied against premiums written, a corresponding amount is transferred from special reserve to retained earnings. See also Note 11.

**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 is expected to become operational in the near future. The Group amortizes the development cost 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.

**Comparative amounts:** Certain comparative amounts have been reclassified to conform to the current year presentation.

**Due from broker:** Due from broker is recorded at cost and subsequently revalued for any impairment that management consider necessary in order to write down these balances to their realizable value. These balances represent net amounts receivable from the Investment Fund's broker for unsettled trades occurring at or around year end.

**4. Cash and cash equivalents**

Cash and cash equivalents comprise:	<u>2013</u>	<u>2012</u>
Current and call accounts	\$ 2,005,966	\$ 3,685,990
Certificates of Fixed Deposit	<u>                  -</u>	<u>9,006,007</u>
	<u>\$ 2,005,966</u>	<u>\$ 12,691,997</u>

Cash and cash equivalents are primarily held by one bank in the Cayman Islands and managed within guidelines established by the Board of Directors. All fixed deposits matured within 90 days at purchase.

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**5. Investments**

The Group has engaged the services of London and Capital and EFG Bank to provide asset management services under the terms of the related investment management agreements.

The following table summarizes the Group's investments that are measured at fair value at May 31, 2013:

	<b>Fair Value Measurements Determined Using:</b>			
	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Total</b>
	<b>inputs</b>	<b>inputs</b>	<b>inputs</b>	
Non-exchange traded mutual funds	\$ -	\$ 14,197,320	\$ -	\$ 14,197,320
Exchange-traded funds	809,800	-	-	809,800
Corporate debt securities	-	96,710,884	-	96,710,884
Sovereign debt securities	-	7,352,540	-	7,352,540
Short term investments	<u>858,522</u>	<u>-</u>	<u>-</u>	<u>858,522</u>
	<u>\$ 1,668,322</u>	<u>\$ 118,260,744</u>	<u>\$ -</u>	<u>\$ 119,929,065</u>

The following table summarizes the Group's investments that are measured at fair value at May 31, 2012:

	<b>Fair Value Measurements Determined Using:</b>			
	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Total</b>
	<b>inputs</b>	<b>inputs</b>	<b>inputs</b>	
Non-exchange traded mutual funds	\$ -	\$ 9,532,893	\$ -	\$ 9,532,893
Exchange-traded funds	766,006	-	-	766,006
Corporate debt securities	-	81,946,869	-	81,946,869
Sovereign debt securities	2,543,945	6,841,511	-	9,385,456
Short term investments	<u>1,874,470</u>	<u>-</u>	<u>-</u>	<u>1,874,470</u>
	<u>\$ 5,184,421</u>	<u>\$ 98,321,273</u>	<u>\$ -</u>	<u>\$ 103,505,694</u>

At May 31, 2013, the Group holds positions in 6 (2012: 5) non-exchange traded open ended mutual funds, incorporated in Ireland and Luxembourg. The objectives of the funds are primarily to maximise total return and capital growth by investing in, among other securities, short to long term fixed and floating-rate investment grade and non-investment grade debt securities, and other debt securities issued by issuers located European companies and other wealthy nations. 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 respective administrators of the mutual funds have the ability to suspend redemptions if it is considered to be in the best interests of the shareholder group (of the respective funds) as a whole. There are no unfunded commitments to these mutual funds.

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**5. Investments (continued)**

At May 31, 2013, approximately 22% and 31% (2012: 19% and 44%) of the debt securities were issued by counterparties in the United Kingdom and the United States, respectively. Most of the remaining debt securities were issued by counterparties in various other European countries. Approximately 37 % (2012: 47%) of the debt securities had a credit rating of A- or higher, 33% (2012: 25%) were rated BBB or higher, 30% (2012: 27%) had a credit rating of lower than BBB. The debt securities portfolio had an average maturity of approximately 5.3 years (2012: 5 years) from May 31, 2013. The company is exposed to foreign exchange risk on debt securities that corresponds to the jurisdiction of the issuing counterparties.

Included within investments are corporate debt securities with fair value of \$1,466,015 (2012: \$4,583,804) that have been pledged to cover margin requirements with respect to the forward contracts (see Note 3 and 10).

Short term investments consist of cash held with the investment managers, term deposits and margin call accounts (see Note 10). Also, short term investments, are primarily amounts denominated in British Pound Sterling of \$114,487 (2012: \$219,726) and Euros of \$221,787 (2012: \$408,189). The margin call accounts are restricted cash balances required to be posted with respect to the futures contracts (see Note 3 and 10).

**6. Donor Funds**

During the year ended May 31, 2013 the Company was involved in the Munich Climate Insurance Initiative (“MCII”) donor trust fund.

The MCII is funded by the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety. Under the agreement, the Company is eligible to receive funding up to €608,880 over the 3 year period to March 15, 2014 for reimbursable costs involving the time costs and travel expenses of the Facility Supervisor project team in partnership with MicroEnsure (an independent entity specialising in the development of micro-insurance programs) to perform market research and assess demand for new micro-insurance parametric products, specifically for community business groups and regional development banks.

During the year ended May 31, 2013 and 2012, the following costs were reimbursed and/or reimbursable by the Donor Funds:

	<u>2013</u>	<u>2012</u>
Expenses on parametric reinsurance contracts	\$ -	\$ 573,452
Claims paid on parametric contracts	-	-
Directors’ fees and expenses	-	-
Facility management fees and expenses	-	-
Other allowable recurring expenditure	<u>-</u>	<u>-</u>
Multi Donor Trust Fund	-	573,452
Munich Climate Initiative Project Costs	<u>354,709</u>	<u>183,142</u>
Income from Donor Funds	<u>\$ 354,709</u>	<u>\$ 756,594</u>

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**6. Donor Funds (continued)**

At May 31, 2013 and 2012, the following cost reimbursements were due from the Donor funds:

	<u>2013</u>	<u>2012</u>
Munich Climate Initiative Project Costs	\$ <u>68,802</u>	<u>100,618</u>
Amounts due from Donor Funds	\$ <u>68,802</u>	\$ <u>100,618</u>

At May 31, 2013 the unutilized amount under the MCII grant was approximately €215,080 (2012: €460,767) that was available for future eligible expenditure.

**7. Accounts payable and accrued expenses**

Accounts payable comprises accruals for expenses at year end. Included within accounts payable is an amount of \$14,991 (2012: \$108,291) relating to technical assistance expenses incurred (see Note 3).

**8. Income from parametric contracts received in advance**

At May 31, 2013, income from parametric contracts received in advance represents amounts paid by Participating Countries with respect to the 2013/14 policy during the year ended May 31, 2013.

**9. Participation fees deposits**

Participating fee deposits represent non-recurring amounts required to be paid by each Participating Country to enter the program. The deposits are equivalent to 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 generated by the Group will be used to reinstate the deposits to their original carrying value, however, for the period from inception to May 31, 2013, no deposits have been used to pay losses. The participation fees are refundable, without interest, in the event that the Group 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. 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 years ended May 31, 2012 and 2013, some Participating Countries elected to use a proportion of participation fee deposits to partially settle their premiums (refer to consolidated statements of cash flow for amounts).



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**10. Derivative instruments**

The Group uses derivatives for hedging purposes and for efficient portfolio management. The Group transacts in a variety of derivative instruments including futures, forwards, swaps 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 consolidated balance sheets 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 consolidated statements of income (see Note 13).

The following tables indicate the realized and unrealized gains and losses on derivatives, by contract type, as included in investment income in the consolidated statements of income (see Note 13).

For the year ended May 31, 2013:

	<b>Gross realized gains</b>	<b>Gross realized loss</b>	<b>Total realized gains/(loss)</b>	<b>Change in unrealized gains/(loss)</b>
Commodity contracts	\$ 187,664	\$( 1,246,093)	\$( 1,058,429)	\$ -
Equity contracts	262,781	( 508,658)	( 245,877)	-
Credit contracts	236,543	( 98,308)	138,235	-
Foreign exchange contracts	<u>2,638,412</u>	<u>( 2,620,754)</u>	<u>17,658</u>	<u>( 179,403)</u>
Total	<u>\$ 3,325,400</u>	<u>\$( 4,473,813)</u>	<u>\$( 1,148,413)</u>	<u>\$( 179,403)</u>

For the year ended May 31, 2012:

	<b>Gross realized gains</b>	<b>Gross realized loss</b>	<b>Total realized gains/(loss)</b>	<b>Change in unrealized gains/(loss)</b>
Commodity contracts	\$ 5,302,356	\$( 7,085,092)	\$( 1,782,736)	\$ -
Equity contracts	673,635	( 1,045,158)	( 371,523)	( 39,736)
Credit contracts	26,917,920	( 25,587,104)	1,330,816	( 304,087)
Foreign exchange contracts	<u>5,196,947</u>	<u>( 2,305,172)</u>	<u>2,891,775</u>	<u>1,036,498</u>
Total	<u>\$ 38,090,858</u>	<u>\$( 36,022,526)</u>	<u>\$ 2,068,332</u>	<u>\$ 692,675</u>

**Credit default swap transactions**

The buyer of a CDS is generally obligated to pay the seller a periodic stream of payments over the term of the contract in return for a contingent payment upon the occurrence of a credit event with respect to an underlying reference obligation. Generally, a credit event for corporate or sovereign reference obligations means bankruptcy, failure to pay, obligation acceleration, repudiation/moratorium or restructuring. For CDSs on asset-backed securities, a credit event may be triggered by events such as failure to pay principal, maturity extension, rating downgrade or write-down. If a credit event occurs, the seller typically must pay the contingent payment to the buyer, which is typically the par value (full notional value) of the reference obligation, though the actual payment may be mitigated by terms of the agreement, allowing for netting arrangements and collateral. After a credit event occurs, this amount may be reduced by anticipated recovery rates, segregated collateral and netting arrangements that may incorporate multiple transactions with a given counterparty.

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**10. Derivative instruments (continued)**

The contingent payment may be a cash settlement or a physical delivery of the reference obligation in return for payment of the face amount of the obligation. If the Group is a buyer and no credit event occurs, the Group may lose its investment and recover nothing. However, if a credit event occurs, the buyer typically receives full notional value for a reference obligation that may have little or no value. As a seller, the Group receives a fixed rate of income throughout the term of the contract, provided that no credit event occurs. If a credit event occurs, the seller may pay the buyer the full notional value of the reference obligation.

During the year ended May 31, 2013, where the Group was buying protection and where the Group was the seller of protection, the Group's maximum notional exposure at any one point in time was approximately \$32m (2012: \$50m) and \$0m (2012: \$5m) respectively. The notional amounts approximate the maximum potential amount of future payments that the Group could be required to make if the Group were the seller of protection (or receive if the Group were a buyer of protection) if the respective credit events were to occur. During the year ended May 31, 2013, the Group realized gains of \$Nil (2012: \$1,780,705) and incurred losses of \$75,988 (2012: \$1,182,101) in CDS transactions.

As of May 31, 2013, the Group is the buyer ("receiving protection") on a total notional amount of \$Nil (2012: \$Nil million) and is the seller ("providing protection") on a total notional amount of \$Nil (2012: \$Nil).

Credit default swaps are carried at their estimated fair value, as determined in good faith by management. In determining fair value, management considers the value provided by the counterparty as well as the use of third party vendors. In addition to credit quality, management monitors a variety of factors including cash flow assumptions, market activity, market sentiment and valuation as part of its ongoing process of assessing payment and performance risk. As payment and performance risk increases, unrealized appreciation is recognized for bought credit protection contracts and unrealized depreciation is recognized for sold credit protection contracts.

**Forwards, futures and options**

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, 2013, 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, 2013 amounted to \$7.91m (2012: \$7.0m) and \$19.8m (2012: \$50.0m) respectively. There were no open futures contracts at May 31, 2013 or 2012.

As at May 31, 2013, the Group had the following outstanding forward foreign currency contracts:

	<u>Expiry date</u>	<u>Notional value</u>	<u>Fair Values at May 31, 2013</u>
Euros forward (bought € sold US\$)	June 2013	€1,050,000 (at forward rate of US\$1.296026: €1)	\$ 4,689
United States Dollars forward (bought US\$ sold €)	June 2013	\$8,469,173 (at forward rate of US\$1.296026: €1)	109,805
United States Dollars forward (bought US\$ sold £)	June 2013	\$15,646,365 (at forward rate of US\$1.51598: £1)	334,971
			<u>\$ 449,465</u>

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**10. Derivative instruments (continued)**

At May 31, 2013, the Group held securities denominated in foreign currencies with a fair value of \$6,577,852 and \$14,687,359 relating to the Euros and British Pound Sterling respectively. See Note 5 regarding short-term investments denominated in foreign currencies.

As at May 31, 2012, the Group had the following outstanding forward foreign currency contracts:

	<u>Expiry date</u>	<u>Notional value</u>	<u>Fair Values at May 31, 2012</u>
United States Dollars forward (bought US\$ sold £)	June 2012	\$16,921,782 (at forward rate of US\$1,538851: £1)	\$ 456,080
United States Dollars forward (bought US\$ sold €)	June 2012	\$5,365,164 (at forward rate of US\$1,236280: €1)	<u>172,788</u>
			<u>\$ 628,868</u>

At May 31, 2012, the Group held securities denominated in foreign currencies with a fair value of \$5,239,941 and \$16,225,740 relating to the Euros and British Pound Sterling respectively. See Note 5 regarding short-term investments denominated in foreign currencies.

**11. Share capital, share premium, special reserve and technical assistance reserve**

	<u>2013</u>	<u>2012</u>
Authorized: 50,000 shares of \$1 each	\$ <u>50,000</u>	\$ <u>50,000</u>
Issued and fully paid: 1,000 shares of \$1 each	\$ 1,000	\$ 1,000
Share premium	<u>119,000</u>	<u>119,000</u>
	<u>\$ 120,000</u>	<u>\$ 120,000</u>

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

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

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**11. Share capital, share premium, special reserve and technical assistance reserve (continued)**

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

The special reserve at May 31, 2013 of \$5,068,170 consists of earnings appropriated to this reserve during the year ended May 31, 2013 and represents funding allocated by the directors to meet a 25% no claims discount proposed to be awarded to Participating Countries in future periods. The reserve will be released to retained earnings in the period which the discount is applied/awarded. During the year ended May 31, 2013, discounts of \$5,010,878 on parametric contracts were awarded to Participating Countries, and as such, the Company released the previous years special reserve of \$5,010,878 to retained earnings in accordance with the Company's policy.

The discount of \$5,068,170 was proposed at the directors' discretion due to there being no events triggering claim payments to Participating Countries during the year ended May 31, 2013.

The technical assistance reserve at May 31, 2013 of \$370,455 (2012: \$846,617) represents unused funding available to the Company only for approved "technical assistance" expenses (See Note 3).

**12. Claims paid**

There were no events in the year ended May 31, 2013 (2012: no events) which triggered claim payments to Participating Countries.

**13. Investment Income**

	<u>2013</u>	<u>2012</u>
Investment income comprises:		
Interest and dividend income	\$ 4,195,867	\$ 3,355,196
Change in fair value of investments	681,345	( 2,603,816)
Net gains/losses on sale of investments	2,782,257	( 1,590,430)
Investment management, custody and fund administration fees	( 988,062)	( 942,807)
Foreign exchange gains	768,887	377,409
Net realized (losses)/gains on derivative instruments (Note 10)	( 1,148,413)	2,068,332
Net unrealized (losses)/gains on derivative instruments (Note 10)	( <u>179,403</u> )	<u>692,675</u>
	<u>\$ 6,112,478</u>	<u>\$ 1,356,559</u>

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**14. Administration expenses**

Administration expenses comprise:

	<u>2013</u>	<u>2012</u>
Audit and other professional fees	\$ 60,750	\$ 54,500
Captive management fees	120,000	120,000
Consultancy fees	105,772	36,852
Board and executive management remuneration	372,426	229,682
Directors' and Officers' insurance	23,750	25,000
Legal fees	8,218	-
Government fees	11,462	11,647
Meeting expenses	77,146	85,346
Publicity	118,140	165,991
Trust expenses (Note 15)	30,000	30,000
Munich Climate Initiative Project (Note 6)*	261,527	307,596
Sundry expenses and bank charges	<u>10,516</u>	<u>9,125</u>
	<u>\$ 1,199,707</u>	<u>\$ 1,075,739</u>

\* See Note 6 for discussion of the Munich Climate Initiative Project. Parts of these expenses were reimbursed under a grant (Note 6).

**15. Related party transactions**

During the year ended May 31, 2013 and 2012, the Group incurred the following expenses on behalf of the Trust:

	<u>2013</u>	<u>2012</u>
Trustee fees	\$ 20,000	\$ 20,000
Enforcer fees	<u>10,000</u>	<u>10,000</u>
	<u>\$ 30,000</u>	<u>\$ 30,000</u>

During the year ended May 31, 2013, key management compensation consisted of employee salary and expense amounting to \$127,529 (2012: nil) which is included within administration expenses.

**16. Taxation**

No income, capital or premium taxes are levied in the Cayman Islands and the Company has been granted an exemption until May 29, 2027, for any such taxes that might be introduced. The Group 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.

**CARIBBEAN CATASTROPHE RISK INSURANCE FACILITY**

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**17. Development cost**

	<b><u>Second Generation Loss Model</u></b>	<b><u>Second Generation Loss Model upgrade</u></b>	<b><u>Excess rainfall</u></b>	<b><u>Total</u></b>
<b>Cost</b>				
Balance brought forward at June 1, 2011	\$ 180,000	\$ 167,040	\$ 60,000	\$ 407,040
Additions during the year	<u>-</u>	<u>47,850</u>	<u>-</u>	<u>47,850</u>
Balance carried forward at May 31, 2012	180,000	214,890	60,000	454,890
Additions during the year	-	164,865	-	164,865
Disposals during the year	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Balance carried forward at May 31, 2013	<u>180,000</u>	<u>379,755</u>	<u>60,000</u>	<u>619,755</u>
<b>Accumulated amortisation</b>				
Balance brought forward at June 1, 2011	\$ 18,000	\$ -	\$ -	\$ 18,000
Amortisation charge for the year	<u>18,000</u>	<u>71,630</u>	<u>6,000</u>	<u>95,630</u>
Balance carried forward at May 31, 2012	36,000	71,630	6,000	113,630
Amortisation charge for the year	<u>18,000</u>	<u>181,540</u>	<u>6,000</u>	<u>205,540</u>
Balance carried forward at May 31, 2013	<u>54,000</u>	<u>253,170</u>	<u>12,000</u>	<u>319,170</u>
Net book value at May 31, 2012	<u>\$ 144,000</u>	<u>\$ 143,260</u>	<u>\$ 54,000</u>	<u>\$ 341,260</u>
Net book value at May 31, 2013	<u>\$ 126,000</u>	<u>\$ 126,585</u>	<u>\$ 48,000</u>	<u>\$ 300,585</u>

Development cost above represents fees paid to third parties for development of computer loss modeling software for the Group which is necessary for the underwriting operations of the Group.

**18. Certain risks and financial instruments**

**(a) Geographical concentration of risk**

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

**(b) Fair value**

The carrying amount of the Group's financial assets and liabilities, excluding investments, approximate their fair value due to their short term maturities. Investments and derivative instruments are carried at fair value as described in Notes 3, 5 and 10.

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

**(c) Credit risk**

Financial assets which potentially subject the Group to concentrations of credit risk consist of cash and cash equivalents, investments in debt instruments, due from broker derivatives and accrued interest receivable. The maximum amount of loss the Group at May 31, 2013 would incur if the counterparties to the transactions do not meet their obligations, would be the carrying amount of such assets in the balance sheet. The Group's cash and cash equivalents and investments are placed with or held in custody by high credit quality financial institutions. Similarly, the Group's investment policy requires that the investment managers invest in securities with a high credit quality (see Note 5). Derivatives are subject to the credit risk of the respective counterparties.

The Group manages credit risk by transacting only with counterparties considered highly reputable and creditworthy and within established investment/derivative guidelines.

**(d) Interest rate risk**

The Group invests in fixed interest securities, the fair value of which will be affected by movements in interest rates. An analysis of the Group's investment portfolio is shown in Note 3. The fair value of the forward and futures contracts may also be affected by movements in interest rates.

**(e) Market risk**

Market risk exists to the extent that the values of the Group's 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 for the Group are both volatility and liquidity of specific securities and of the markets in which the Group holds investments.

**(f) Liquidity risk**

Liquidity risk exists to the extent that the Company and its underlying mutual funds investments may not be able to access cash and/or redeem their investments on a timely basis to settle losses. The frequency of redemption of the Investment Fund is monthly and subject to appropriate notice period. The underlying mutual funds investments and the Investment Fund are also subject to liquidity risk to the extent that certain securities may be thinly traded. The Group mitigates liquidity risk by maintaining a proportion of assets in cash and short-term investments.

**(g) Foreign exchange risk**

In the normal course of business, the Group may hold assets and liabilities in currencies other than U.S. dollars. To reduce its risk to foreign exchange fluctuations the Group may enter forward on the foreign exchange contracts. The Group is exposed 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 the Group 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 10 for details of forward foreign exchange contracts entered into by the Group during the period.

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

**(h) Futures contracts risk**

In the normal course of business, the Group trades financial futures, which 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 10). The notional value of the underlying financial instruments represents the Group's 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, 2013 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 10 to indicate the extent of the Group's exposure to such instruments. At May 31, 2013, the Group had no open swap contracts.

**(j) Options**

Transactions in options carry a high degree of risk. The following section describes the core types of option contracts 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, the Company has 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.



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

**(j) Options (continued)**

Purchased put options represent the right to sell a stock at a fixed exercise price on a future specified date but creates 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, the Company has 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 to the Company. 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 the Company has exposure to a much larger number of the securities (and therefore much 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 to the Company. 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 Company does not own the corresponding quantity of the underlying security), the written call option is exposed to unlimited risk of loss. Compared to selling short the respective stock, written call options exposure the Company to leveraged downside losses when a stock price increases because for the same amount of capital invested and pledged as security, the Company has exposure to a much larger number of the securities (and therefore much larger losses).

At May 31, 2013, the Company had no open option contracts.

**(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 Company's rights to its assets in the case of an insolvency of any such party.

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**19. Due from broker**

Due from broker amount of \$915,768, represents amounts receivable from the Group's investment broker (custodian) for unsettled investment security transactions (sales and maturity proceeds, payables for purchases, or other unsettled investment security proceeds or payables) entered into at or around the year end that had not been settled by the balance sheet date.

The amounts are recorded at the transaction value on the trade date and receivables are subsequently adjusted to record any impairment that management consider necessary in order to write down these balances to their realizable value. At May 31, 2013 and 2012 and during the years then ended there were no impaired receivables due from the brokers.

**20. Subsequent events**

Management have performed a subsequent events review through August 22, 2013, being the date that the financial statements were available to be issued. Management concluded that there were no subsequent events which required additional disclosure in these financial statements.

Published by  
**Caribbean Catastrophe Risk Insurance Facility**

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