Procedures for Payout Calculation and Claims Settlement >>>

There are three steps that are used for calculating payouts:

Step 1:

CCRIF's Facility Supervisor calculates the losses to the Government for the event in each member country using NHC or USGS information as sole input data to the escrowed loss model. A preliminary calculation is made immediately after an event, but the final calculation is made 14 days after an event to ensure that the best information is available from the hazard reporting agency.

Step 2:

If the loss falls above the attachment point (which is the equivalent of a deductible) for a country then a payment is made. The amount of the premium paid by the country dictates how much of the risk between the attachment and exhaustion points the country is actually covered for and the value of the payment is calculated as a proportion of the annual coverage limit purchased by the country. The payout is subject to a minimum of an amount equivalent to the annual premium for that peril, and is paid to the government of the country as soon as the final calculation is made.

Step 3:

The loss and payout calculations are verified by a third-party agent and a verification report is issued.

Accessing Additional Info>>>

Get additional information on CCRIF by accessing our website at <u>www.ccrif.org</u> or by getting a copy of the booklet, *"A Guide to Understanding CCRIF"*, available on the CCRIF website or in hard copy. CCRIF also has many other publications that are designed to provide a more comprehensive understanding of the workings of CCRIF as a catastrophe risk transfer facility and its role in comprehensive disaster risk management in Caribbean countries.

CCRIF 2nd Generation Hazard and Loss Modelling Framework

second-generation hazard CCRIF's and loss modelling framework has been designed to assist CCRIF in developing new policy formulations and in developing regional technical capacity in catastrophe risk modelling. It has enabled a new approach to policy formulation - one of modelled loss instead of index parametric, the latter being the previous basis for policies. This means that the new policy is able to reduce the basis risk in the parametric loss estimates by modelling each loss as it happens, rather than reducing the loss estimation methodology to a series of equations. Additionally, the new model uses the best definition available of the entire wind, storm surge and wave field for hurricane policies and earthquake shaking field for earthquake policies to drive its loss model. Instead of being estimated only at distinct measuring points, the new model estimates the level of hazard and consequent loss for every 1km grid square of a country's territory. The losses are then added up across the country to find the total country-wide loss.



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CCRIF, a not-for-profit company, is the first multicountry risk pool in the world



Caribbean Catastrophe Risk Insurance Facility (CCRIF)

The CCRIF model... an innovative risk transfer option, which can be included in disaster risk management strategies for countries vulnerable to hurricanes and earthquakes and can be a critical component of a country's climate change adaptation strategy

What is CCRIF?

The 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 devastating hurricanes and earthquakes by quickly providing financial liquidity when a policy is triggered. CCRIF was developed through funding from the Japanese capitalised Government, and was 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. Sixteen governments are currently members of the fund: Anguilla, Antigua & Barbuda, the Bahamas, Barbados, Belize, Bermuda, the Cayman Islands, Dominica, Grenada, Haiti, Jamaica, St. Kitts & Nevis, St. Lucia, St. Vincent & the Grenadines, Trinidad & Tobago and the Turks & Caicos Islands.

When was CCRIF Established >>>

The CCRIF idea was prompted by Hurricane Ivan in 2004, which caused billions of dollars of losses across the Caribbean. In both Grenada and the Cayman Islands, losses were close to 200% of the national annual GDP. Following the passage of Ivan, the Caribbean Community (CARICOM) Heads of Government held an emergency meeting to discuss critical issues including the need for the provision of catastrophe risk insurance for its members. CARICOM then approached the World Bank for assistance to design and implement a cost-effective risk transfer programme for member governments. This marked the beginning of what would become the Caribbean Catastrophe Risk Insurance Facility.

Understanding How CCRIF Works

CCRIF was developed to help mitigate the short-term cash flow problems small developing economies suffer after major natural disasters. A critical challenge is often the need for short-term liquidity to maintain essential government services until additional resources become available.

CCRIF - A Parametric Facility >>>

There are four main reasons CCRIF was designed as a parametric facility:

1. Payouts can be calculated and made very quickly because loss adjusters do not have to be relied on to estimate damage after a catastrophe event, which can take months or even years

2. Governments do not have to provide detailed asset values and other information prior to the insurance programme commencing, and have just one form to sign during the entire claims process

3. Calculation of payouts is totally objective, based on independent input parameters published widely in the public domain from the globallymandated body responsible for estimating those particular parameters, and a pre-fixed loss model verified by a third party.

4. The risk, which drives policy pricing, is uniformly defined (i.e. there is no subjectivity in the definition of the risk)

Since CCRIF was tasked with the goal of providing liquidity quickly, a parametric insurance programme was developed. This allows the Facility to estimate the loss on the ground by using data from the National Hurricane Center (NHC) in the case of hurricanes and the United States Geological Survey (USGS) in the case of earthquakes, and a pre-fixed and calibrated catastrophe risk model. This method means that loss adjusters are not required to survey

affected governments to determine loss, a process which can take several months or years and would prevent CCRIF from doing what it was set up to do get funds to member governments quickly. The information provided by the NHC and the USGS are in the public domain and so are available for scrutiny. Both agencies are wellregarded and have been used for years by Caribbean disaster management officials to properly plan for natural disasters.

Factors Determining a Payout

The CCRIF payout calculation proceeds in a very similar way to a traditional insurance payout. The only difference is the way in which the loss

Is assessed. For CCRIF, the loss is calculated through a catastrophe risk model in which hazard levels (wind, storm surge and waves for a hurricane, ground shaking for an earthquake) are calculated and then used to estimate losses. In traditional loss estimation, a loss adjuster will visit each claim and decide what the cost of repair is relative to the original replacement value of the building. Thereafter, payment is dependent on the total amount of coverage a government buys and the deductible selected. It is important to note that the object of the Facility is not to cover the entire losses faced by affected states, but to provide, in case of a major adverse event, short-term liquidity to covered governments to fund both disaster response and basic government functions.



CCRIF Products >>>

CCRIF offers separate hurricane (wind) and earthquake policies. Caribbean governments may purchase coverage which triggers for a 'one-in-15-year' hurricane and a 'one-in-20-year' earthquake, with maximum coverage of US\$100M available for each peril. The cost of coverage is a direct function of the amount of risk being transferred, ensuring no cross-subsidisation of premiums and a level playing-field for all participants. CCRIF is expected to have available for the 2011/12 policy year a new product for excess rainfall.