

PROJECT INFORMATION DOCUMENT (PID) CONCEPT STAGE

Report No.: PIDC3865

Project Name	Central America & Caribbean Catastrophe Risk Insurance Project (P149670)
Region	LATIN AMERICA AND CARIBBEAN
Country	Latin America
Sector(s)	Non-compulsory pensions and insurance (100%)
Theme(s)	Other Financial Sector Development (50%), Other Private Sector Development (50%)
Lending Instrument	Investment Project Financing
Project ID	P149670
Borrower(s)	Caribbean Catastrophe Risk Insurance Facility
Implementing Agency	Caribbean Catastrophe Risk Insurance Facility
Environmental Category	C-Not Required
Date PID Prepared/ Updated	26-Feb-2014
Date PID Approved/ Disclosed	27-Feb-2014
Estimated Date of Appraisal Completion	21-Mar-2014
Estimated Date of Board Approval	01-May-2014
Concept Review Decision	Track II - The review did authorize the preparation to continue

I. Introduction and Context

Country Context

Countries in Central America and the Caribbean are highly vulnerable to the adverse effects associated with earthquakes, hurricanes and other major hydro-meteorological events such as excessive rainfall. Without appropriate fiscal management strategies, major catastrophic events jeopardize efforts to end extreme poverty and boost shared prosperity and reverse hard-won development gains. In the immediate aftermath of disasters, countries in Central America and the Caribbean have experienced significant macro-economic instability and major public sector budget variability. These macro-economic and budget impacts lead to reduced access to, and quality of public services as well as higher debt levels incurred and transferred onto future generations. Typically, these challenges disproportionately affect the poorest as they are most dependent on social and public service delivery.

Since 1980, nine countries in Central America and the Caribbean have experienced a disaster event with an economic impact above 50 percent of its annual GDP (for the year of the impact). Public and private assets in the health, education, water, transport, and infrastructure sectors often incur the majority of damages associated with catastrophic events - subsequently contributing to large fiscal deficits and debt accumulations requiring public debt restructuring. At the household level, World Bank research of past catastrophic events has shown that adverse catastrophic events have led to significant drops in household consumption per capita, resulting in coping mechanisms commonly taken by the poor which include decreasing calorie consumption, selling vital assets, working longer hours and pulling children out of school. The adverse impacts of disaster can also be disproportionate by gender. Oftentimes, women experience higher rates of mortality, morbidity, and diminishment in their livelihoods post-disaster.

In the Caribbean, the damage and losses associated with large-scale catastrophic events such as earthquakes and hurricanes between 1990 and 2008 have been estimated to total at least US\$23 billion; in the same period, the Central American region incurred close to US\$21 billion in disaster-related damages and losses. While earthquakes are associated with the highest probable maximum loss per event to governments in Central America and some Caribbean islands, extreme rainfall events have been known to cause the greatest accumulated losses to certain countries in the Caribbean basin. Hydro-meteorological disasters are by far the most frequent in both sub-regions, with associated economic damages equivalent to more than one percent of national GDP per year for 14 countries in the sub-regions.

Sectoral and Institutional Context

Governments throughout Central America and the Caribbean have made significant institutional advances to improve their disaster risk management capabilities and capacities, but remain fiscally vulnerable to disasters. Most countries have passed legislation, developed policies, and created institutions to enable more efficient emergency management; and procedures are in place to help provide early warnings to citizens prior to a disaster. As a result, fewer lives are lost today per hazard event than in past decades. However, the economic value of damages to property and livelihoods continue to rise in both sub-regions due to the high level of vulnerability and rising exposure.

The limited ability to absorb fiscal shocks associated with natural hazard impacts is for many Central American and Caribbean countries related to limited capacity for external borrowing and budget allocation. In the Caribbean, current high levels of government debt are partly due to recovery costs associated with past disasters, as well as the fact that Caribbean economies are too small to absorb the shock effect of catastrophic events. Consequently, borrowing to finance reconstruction efforts has proven too costly or impossible for many Caribbean governments. In Central America, while countries are able to distribute disaster risk over a wider geographic area and are therefore able to maintain greater borrowing capacity for reconstruction purposes, some catastrophic shocks still exceed the capacity of national economies. Disaster response frameworks continue to rely heavily on ad hoc budget reallocations, emergency calls for donor assistance, and on simply not replacing or repairing damaged capital stock.

Catastrophe risk pooling at the regional level is a cost-efficient way for Central American and Caribbean countries to enable access to quick liquidity following a catastrophic event. Insurance would mobilize additional capital from outside the country, which could contribute to the overall reduction of the gap between a government's contingent liability to catastrophic events and the

amount of readily available resources that can be mobilized. Effectively transferring part of their disaster risk to capital and reinsurance markets can help solve a significant portion of countries' immediate liquidity needs in the aftermath of a disaster. Engaging private capital and reinsurance markets further helps to influence wider decision-making involving national emergency budget allocation and fiscal planning systems so as to achieve greater disaster resilience.

The world's first multi-country catastrophe risk pooling mechanism is the Caribbean Catastrophe Risk Insurance Facility (CCRIF), which has covered 16 countries of the Caribbean Community (CARICOM) with tropical cyclone (wind and ocean hazards) and earthquake risk insurance since 2007. A typical CCRIF policy in the Caribbean will cover 10-15 percent of expected government losses for disaster events that occur less frequently than once every 10 to 20 years and provide the cheapest possible option for quick liquidity in the aftermath of large disasters. CCRIF enables the aggregation of national risk into larger, more diversified portfolios, a collective build-up of risk retention capacity, and cheaper access to international reinsurance markets, thereby resulting in more affordable premiums. Expanding the membership of CCRIF to Central America and the Dominican Republic would further diversify CCRIF's risk pool, improve the sustainability of CCRIF, lead to cheaper premiums for existing CCRIF members, and allow new members access to the same benefits.

Relationship to CAS

The proposed Project is consistent with the individual Country Partnership Strategies (CPS) for the Central American and the Caribbean countries, in which the World Bank Group commits to strengthening the governments' capacities to utilize financial instruments to protect themselves against the adverse fiscal impacts of catastrophic events. It will support the World Bank Group's dual goals of ending extreme poverty and promoting shared prosperity by assisting the CARICOM and COSEFIN countries achieve their priority of better managing the fiscal impacts of catastrophic shocks arising from tropical cyclones, earthquakes, and/or excess rainfall. Improving affordability of sovereign catastrophe risk transfer options will provide Ministries of Finance with an option for better fiscal management of these shocks and will help mitigate macro-economic and budget impacts that otherwise lead to reduced access to, and quality of, public services as well as higher debt levels that are transferred onto future generations.

II. Proposed Development Objective(s)

Proposed Development Objective(s) (From PCN)

The Project Development Objective (PDO) is to increase the fiscal resilience of the Central American countries, the Dominican Republic, and CARICOM member countries to catastrophic events resulting from tropical cyclones, earthquakes, and/or excess rainfall. This will be achieved by:

- a) Establishing the necessary conditions for Central America and the Dominican Republic (the COSEFIN countries) to join the Caribbean Catastrophe Risk Insurance Facility (CCRIF) and purchase tropical cyclone and earthquake coverage from it;
- b) Facilitating the up-take of CCRIF's excess rainfall product by supplementing the risk capital that it has allocated to that product so as to enhance its affordability to both the COSEFIN and CARICOM member countries.

Key Results (From PCN)

The PDO level result indicator is as follows: Any CCRIF member country eligible for catastrophe risk coverage has received payment in the case of a covered (insured) event. Accordingly, the

following outcomes are expected:

- a) Increasing COSEFIN New Members' Financial Resilience to Earthquakes and Tropical Cyclones (wind).
 - i. COSEFIN countries that have joined CCRIF annually purchase catastrophe risk insurance from CCRIF covering at least one peril (at least four countries).
 - ii. Pricing of the policies purchased has actuarial consistency with CCRIF's survivability and long-term sustainability. (Reserves to back up claims are equivalent to or larger than payouts arising from a series of catastrophic events having a modeled frequency of 1/200 years.)
- b) Supporting Affordability of the Excess Rainfall Product.
 - i. Technical preconditions for launch of the excess rainfall product have been fulfilled for at least 5 countries by the end of the Project.
 - ii. CCRIF has increased its annual sales of the excess rainfall product to at least five CARICOM and/or COSEFIN member countries by the end of the Project.
 - iii. The pricing of the excess rainfall policies is actuarially consistent with CCRIF's survivability and long-term sustainability. (Reserves to back up claims are equivalent to or larger than payouts arising from a series of excess rainfall events having a modeled frequency of 1/200 years.)

III. Preliminary Description

Concept Description

The Project has two components, one corresponding to each of the outcomes described above. Project components have been identified in collaboration with COSEFIN and CARICOM countries and partners and have been aligned with the World Bank Group's priorities.

Component 1: Establishment of Parametric Tropical Cyclone and Earthquake Products for COSEFIN countries within CCRIF

Under Component 1, CCRIF will pool the hurricane and earthquake risk of participating COSEFIN member states in a segregated portfolio. This will allow for separation of risk management operations for COSEFIN countries (e.g. pricing, insurance policy format, reinsurance strategy) from those of Caribbean countries. The COSEFIN insurance pool will mimic the existing CARICOM portfolio within CCRIF, which provides parametric insurance for earthquake and hurricane coverage to CARICOM member countries. CCRIF is exploring options for establishing a third segregated portfolio to combine the COSEFIN and CARICOM risk for purposes of securing reinsurance. This could capture nearly all of the diversification and cost benefits that would be achieved from combining the COSEFIN and CARICOM risk in a single, integrated pool.

Specific activities associated with this component will involve: (a) coverage of reinsurance costs; and (b) financing of insurance payouts not covered by the reinsurance in the aftermaths of a hurricane or earthquake. By covering the main costs associated with providing tropical cyclone and earthquake coverage to the COSEFIN countries, the Project will enable CCRIF to retain more of its premium and other income from the coverage, thereby building its capital to underwrite such coverage more quickly than would otherwise be possible, and leaving a fully capitalized risk retention ability with the Central American portfolio at Project closing. As CCRIF builds its risk-bearing capacity, it is expected that it should be self-sustainable by the end of the Project.

Component 2: Establishment of an Excess Rainfall Product for CARICOM and COSEFIN countries
Component 2 will enable CCRIF to provide excess rainfall coverage to both CARICOM and COSEFIN members. The technical design work that needs to be completed for a country in order to

launch the excess rainfall product includes: (i) preparation of a country-risk assessment model; (ii) calibration of this model; (iii) actuarial analyses; and (iv) design of a country-specific insurance based on these parameters. For the CARICOM countries, CCRIF has already generated the country-risk assessment models for excess rainfall and is advancing work on model calibration in collaboration with interested governments and actuarial analyses. In the case of the COSEFIN members, CCRIF would also lead and finance the technical design work to underwrite the potential excess rainfall losses in close collaboration with the interested countries. It is expected that the model work will be completed for both regions during calendar year 2015.

Sub-Component 2.1: Establishment of an Excess Rainfall Product for CARICOM members. Specific activities associated with this component will involve: (a) coverage of reinsurance costs and (b) financing of insurance payouts not covered by the reinsurance in the aftermaths of an excess rainfall event. This sub-component will cover the main costs of risk retention and transfer for the CCRIF, with regards to the excess rainfall peril of participating CARICOM countries. It would enable CCRIF to accumulate the capital that is raised through income for the purpose of covering excess rainfall events throughout the period of the Project, and thereby leave fully capitalized risk retention ability for CARICOM members with regards to excess rainfall at Project closing.

Sub-Component 2.2: Establishment of an Excess Rainfall Product for COSEFIN members. Specific activities financed under this component are: (a) coverage of reinsurance costs; and (b) financing of insurance payouts not covered by the reinsurance in the aftermaths of an excess rainfall event. This sub-component will cover the main costs of risk retention and transfer for the CCRIF, with regards to the excess rainfall peril of participating COSEFIN countries. It would enable CCRIF to accumulate the capital that is raised through income for the purpose of covering excess rainfall events during the period of the Project, and thereby leave fully capitalized risk retention ability for COSEFIN members with regards to excess rainfall at Project closing.

IV. Safeguard Policies that might apply

Safeguard Policies Triggered by the Project	Yes	No	TBD
Environmental Assessment OP/BP 4.01		X	
Natural Habitats OP/BP 4.04		X	
Forests OP/BP 4.36		X	
Pest Management OP 4.09		X	
Physical Cultural Resources OP/BP 4.11		X	
Indigenous Peoples OP/BP 4.10		X	
Involuntary Resettlement OP/BP 4.12		X	
Safety of Dams OP/BP 4.37		X	
Projects on International Waterways OP/BP 7.50		X	
Projects in Disputed Areas OP/BP 7.60		X	

V. Financing (in USD Million)

Total Project Cost:	53.01	Total Bank Financing:	0.00
Financing Gap:	0.00		
Financing Source			Amount

Borrower	0.00
Free-standing Single Purpose Trust Fund	53.01
Total	53.01

VI. Contact point

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