

TC Document

I. Basic Information for TC

▪ Country/Region:	REGIONAL
▪ TC Name:	Structuring of the Caribbean Water Utility Insurance Company (CWUIC SP)
▪ TC Number:	RG-T4105
▪ Team Leader/Members:	Cathala, Corinne (INE/WSA) Team Leader; Cayetano, Evan Stephen (INE/WSA) Alternate Team Leader; Carlos Guiza (INE/WSA); Crespín Villatoro, Leslie Alexandra (INE/WSA); García Merino, Lucio Javier (INE/WSA); Lewis, Gilroy Francis (INE/WSA); Sara Jade Govia (INE/WSA); Vila Saint-Etienne, Sara (LEG/SGO)
▪ Taxonomy:	Research and Dissemination
▪ Operation Supported by the TC:	N/A
▪ Date of TC Abstract authorization:	18 Mar 2022.
▪ Beneficiary:	Barbados, Belize, The Bahamas, Haiti, Jamaica, and Trinidad and Tobago, Guyana y Suriname and Dominican Republic
▪ Executing Agency and contact name:	Inter-American Development Bank
▪ Donors providing funding:	Multidonor AquaFund(MAF)
▪ IDB Funding Requested:	US\$300,000.00
▪ Local counterpart funding, if any:	US\$0
▪ Disbursement period (which includes Execution period):	36 months
▪ Required start date:	August 2022
▪ Types of consultants:	Consulting firms and Individual consultants
▪ Prepared by Unit:	INE/WSA-Water & Sanitation
▪ Unit of Disbursement Responsibility:	INE/WSA-Water & Sanitation
▪ TC included in Country Strategy (y/n):	No
▪ TC included in CPD (y/n):	No
▪ Alignment to the Update to the Institutional Strategy 2010-2020:	Environmental sustainability; Institutional capacity and rule of law; Productivity and innovation; Social inclusion and equality

II. Objectives and Justification of the TC

2.1 The objective of this TC is to support the structuring of the Caribbean Water Utility Insurance Company SP (CWUIC SP) as a Segregated Portfolio within the Caribbean Catastrophic Insurance Facility (CCRIF) SPC¹. CWUIC SP will be created as an insurance vehicle specifically for insuring water utilities in the Caribbean for natural

¹ In 2007, the Caribbean Catastrophe Risk Insurance Facility was formed as the first multi-country risk pool in the world and was the first insurance instrument to successfully develop parametric policies backed by both traditional and capital markets. In 2014, the Facility was restructured into a segregated portfolio company (SPC) to facilitate offering new products and expansion into new geographic areas and is now named CCRIF SPC. It is owned, operated and registered in the Caribbean. CCRIF SPC limits the financial impact of natural hazard events to Caribbean and Central American governments by quickly providing short-term liquidity when a policy is triggered. Parametric insurance policies are offered for tropical cyclones, earthquakes, excess rainfall and the fisheries sector.

disasters. CWUIC SP can result in economies of scale that reduce costs and allow the utilities to obtain reinsurance on improved terms.

- 2.2 Jurisdictions in the Caribbean are vulnerable to natural disasters and experience disproportionate losses². To illustrate the difference between the impact of a hurricane on a jurisdiction in the Caribbean versus the United States, the Caribbean Catastrophe Risk Insurance Facility Segregated Portfolio Company (CCRIF SPC) reported that while Hurricane Katrina caused several hundred billion dollars in damage it only caused a 1 percent loss of gross domestic product (GDP) to the United States' economy³. In comparison, Hurricane Ivan resulted in an over 200 percent loss to GDP for the Cayman Islands and Grenada.⁴ (See annex for more information). Those events include hurricanes, windstorms, drought, landslides, flooding, tidal waves, volcanic eruptions, and earthquakes. Out of 30 Caribbean jurisdictions, 21 are susceptible to at least 5 of the 8 types of natural disasters (See Annex for a List of the Caribbean countries that are members of IDB, CDB and CCRIF).
- 2.3 The Global Climate Risk Index analyses to what extent countries and regions have been affected by impacts of weather-related loss events. Floods due to heavy rains or hurricanes in the Caribbean particularly have caused significant damage to the infrastructure and the livelihood of people (eg. Haiti with Hurricane Matthew in 2016). 2019 was a relatively "average year" for the Caribbean regarding the number of weather and other natural disasters⁵. Nonetheless, it witnessed a category 5 hurricane, Hurricane Dorian, that hit The Bahamas and caused several billions of dollars in damage, with losses exceeding 25 percent of The Bahamas' GDP⁶. Total damages from a sample of natural disasters in the Caribbean amounted to USD 92.5 billion between 2015-2019 (See Annex for a subset of natural disasters that have struck the Caribbean in the past 30 years).
- 2.4 The LAC region is the second region in the world most likely to be impacted by natural disasters⁷. Those events very often impact water and sanitation infrastructure, for instance, wastewater networks. The impact of floods is magnified when superficial runoffs in urban areas transport contaminants such as heavy metals, organic loads, suspended solids, oils, and grease.
- 2.5 Water utilities in the Caribbean, and by extension the utilities' customers, are vulnerable to the extensive damage and losses that can be caused by natural disasters. Utilities will face rising costs to repair damage because of the forecasted increases in the intensity and severity of windstorms. Currently, insurance providers in the Caribbean cannot offer natural disaster insurance to Caribbean water and

² GIZ. 2017, p. 2. Loss and damage in the Caribbean: Climate change realities in Small Island Developing States. Deutsche Gesellschaft für Internationale Zusammenarbeit.

³ Global Climate Risk Index for 2017 accessed from Germanwatch on 5 September 2019.

⁴ CCRIF SPC. 2011, P. 11. A collection of papers, articles, and expert notes: volume 2. Caribbean Catastrophe Risk Insurance Facility.

⁵ Per Colorado State University data, for the period 1981 – 2010 the Atlantic Ocean had, on average, 12.1 named storms and 6.4 hurricanes, of which 2.7 were intense, category 3 or higher, hurricanes. The 2019 hurricane season in the North Atlantic Ocean included 18 named storms and 6 hurricanes, of which 3 were considered "intense." Source Hurricane Center, National Oceanic and Atmospheric Agency

⁶ Source: Inter-American Development Bank November 15, 2019 report.

⁷ UN Office for Coordination Humanitarian Affairs, 2020.

wastewater utilities on affordable terms⁸. Therefore, many utilities self-insure, meaning that they do not obtain insurance to cover potential damages from natural disasters. However, most utilities lack the budgets to restore services quickly after catastrophes occur, and they often do not have the resources available to fund concerted efforts to improve the resiliency of their systems. These utilities, therefore, need more and better insurance for natural disasters.

- 2.6 The IDB Group is leading the development of CWUIC SP and is working closely with the CCRIF SPC to establish CWUIC as a segregated portfolio (SP) within CCRIF SPC. To date, the IDB has secured US\$1.3 million in grant funding from the Pilot Program for Climate Resilience (PPCR) for the development of CWUIC, has begun discussions with the Caribbean Development Bank (CDB) regarding grant funding for modeling of multiple perils for water utilities in the Caribbean (with an estimated cost in the range of US\$0.5 to 1.0 million), and is working jointly with the Foreign, Commonwealth and Development Office of the UK (FCDO) to prepare a contribution to structure CWUIC SP.
- 2.7 This TC is consistent with the Second Update to the Institutional Strategy (AB-3190 2) and is expected to contribute to the Corporate Results Framework 2020-2023 (GN-2727-12) through the priorities of: (i) Social Inclusion and Equality, by contributing to the indicator “Projects incorporating structural and/or non-structural measures that enhance disaster and climate change resilience in the water and sanitation sector”; and (ii) Productivity and Innovation, by contributing to the indicator “Micro, small, medium enterprises financed” and by financing the design of an innovative vehicle to provide disaster risk insurance to the water utilities. It also aligns to the cross-cutting issues of: (i) Climate Change and Environmental Sustainability, by contributing to the indicator “Beneficiaries of enhanced disaster and climate change resilience” since CWUIC SP will assist water utilities to mobilize financing for the development of projects to adapt to climate change and natural disasters.; and (ii) Institutional Capacity and Rule of Law, by contributing to the indicator “Development financial institutions with strengthened managerial capacity”, through the technical assistance to be provided to these institutions to assess the disaster risk of the grants and loans to be provided under Component 3 of this TC.
- 2.8 In addition, under “Productivity and Innovation”, the TC is particularly noteworthy as being aligned to support Caribbean countries to obtain disaster insurance through an innovative mechanism for environmental sustainability and adaptation to climate change. The operation is further aligned with the Strategy “Sustainable Infrastructure for Competitiveness and Inclusive Growth” (GN-2710-5), specifically with the priority action area to “support the construction and maintenance of socially and environmentally sustainable infrastructure, thus enhancing quality of life,” through actions that will contribute to safe and more resilient infrastructure. It is also consistent with the Disaster Risk Management Policy (GN-2354-5), by identifying disaster risks, reducing vulnerability and by preventing and mitigating disasters before they occur, and with the Support to SME and Financial Access/Supervision Sector Framework

⁸ Surveyed utilities and local insurance providers indicated that the cost of natural disaster insurance that is currently available is beyond the means of most public utilities. Additionally, with respect to insurance that may be available, public and private water utilities indicated that the high insurance deductibles and limitations on what could be claimed meant that the insurance did not meet their needs.

Document (SFD) (GN-2768-7). In addition, this TC is aligned with the five dimensions defined in the Water and Sanitation SFD (GN-2781-13) approved in December 2021.

- 2.9 In the SFD, the dimensions of success and lines of action for the sector were defined, including: (i) developing tools to design projects that take climate change into account in hydrometeorological variables, improving data to forecast the risk, frequency, and intensity of extreme events; (ii) better understanding the physical and economic impact of disaster and climate change risks and the adaptation and mitigation measures by region and economic sector; (iii) incorporating risk management into infrastructure standards, master plans, and design (OECD, 2013); and (iv) implementing nonstructural measures, such as early warning systems, contingency plans and disaster risk management (including for droughts) and institutional strengthening. The TC is also consistent with the Climate Change SFD (GN-2835-8). Resources of this TC are invested in supporting the improvement of infrastructure for disaster resilience. The TC is also consistent with the respective country strategies of the beneficiary countries as the TC activities will foster climate change resilience as well as adaptation. In addition, the TC is consistent with the Multi-Donor AquaFund (MAF) in that it promotes innovation and supports the water utilities of the region to achieve Sustainable Development Goals⁹ No.6 through the improvement in water utilities' operational efficiency and resiliency to weather events (GN-2487-12). This operation is consistent with Vision 2025 in that it will strengthen water utilities' resiliency against climate change through the establishment of a regional vehicle that will provide natural disaster insurance policies to water utilities in the Caribbean region at affordable rates and financing to invest in climate resilient infrastructure. The TC will also promote the IDB's sub-regional efforts to promote smart and resilient investments in the Caribbean.

III. Description of activities/components and budget

- 3.1 **Component I: Private sector participation in CWUIC SP.** Resources from this component will finance a feasibility study to assess opportunities to provide parametric risk insurance to private water operators as well as private companies in the Caribbean, which provide a water/wastewater treatment service, in addition to public utilities that are already natural beneficiaries of the insurance product. This component will be conducted by an individual consultant or consulting firm.
- 3.2 **Component II: Training and capacity building for water utilities.** Resources allocated to this component will finance: (i) the preparation and delivery of training to water utilities on participation in the CWUIC SP response program; (ii) training to water utilities on pre-disaster preparation and post-disaster assistance and coordination between utilities to restore and rebuild water utilities post disaster; (iii) the organization of two specific workshops: one workshop will gather all parties directly involved in the establishment of CWUIC CP (CCRIF, CDB, CWWA, CAWASA and IDB)¹⁰ as well as Caribbean water utilities to train water utilities on how CWUIC SP will operate in greater details. A second training workshop will be organized with the Center for Disaster Protection with the water utilities in the Caribbean on disaster risk financing; and (iv) a series of training workshops for the water utilities will be conducted on the

⁹ <https://sdgs.un.org>

¹⁰ CCRIF: Caribbean Catastrophe Risk Insurance Facility; CDB: Caribbean Development Bank; CWWA: Caribbean Water and Wastewater Association; CAWASA: Caribbean Water and Sewerage Association.

preparation of Emergency Response Plans, Business Continuity Plans (including pandemic), facility audits and gap analysis related to emergency management. This component will be carried out by individual consultants.

- 3.3 **Component III: Establishment of Trust Fund.** Resources from this component will finance: (i) the structuring of a trust fund, which sole purpose will be to establish and own CWUIC SP. When the trust is operational, its only function will be to own 100 percent of CWUIC SP. The beneficiaries of the Trust will be the participating water utilities. The component will cover legal fees to establish the trust fund. This component will be conducted by an individual consultant.
- 3.4 **Component IV. Data collection.** Resources from this component will finance the collection of data from water utilities to be used to build the multi-peril risk model. To advance the structuring of CWUIC SP, it is imperative to have accurate, complete, and current data on the financial and physical characteristics of the water utilities envisaged to participate in CWUIC SP including data on the jurisdictions in which they reside. Data will include water treatment plants and wastewater treatment plants pumping stations and storage tanks, transmission and distribution networks, dams, or reservoirs as well as historical accounting of damages caused by natural hazards since 2000. Data from the rest of the Caribbean region has been covered with two different funding sources (IDB and CDB). The multi-peril risk model is key in defining the level of capital contribution that will be required to set up CWUIC as well as the level of premiums for the insurance policies. This component will be carried out by the consulting firm that has been identified for direct contracting. K&M has thorough knowledge of the water sector and utilities in the Caribbean region and has conducted data collection with several of the utilities.
- 3.5 **Component V. Knowledge products.** Resources from this component will finance the preparation of the following knowledge products: (i) the preparation of a document, which will document the different steps to develop CWUIC SP; and (ii) a compendium of data and information on the water utilities, which were gathered as a result of the data collection for the risk model. This component will be conducted by individual consultants.
- 3.6 The TC is expected to be disbursed over a period of 36 months. An indicative budget is described in the table below. This TC will be financed by the Multi-Donor AquaFund (MAF).

Indicative Budget

Activity/Component	Description of activities	IDB/Fund Funding	Total Funding
Component I: Private sector participation in CWUIC SP	Feasibility study to assess opportunities to provide parametric risk insurance to private water operators as well as private companies in the Caribbean, which provide a water/wastewater treatment service.	US\$85,000	US\$85,000
Component II: Training and capacity building for water utilities	Preparation and delivery of training to water utilities on participation in the CWUIC SP response program; training to water utilities on pre-disaster preparation and post-disaster assistance and coordination between utilities to restore and rebuild water utilities post disaster; (iii) the organization of two specific workshops: one workshop will gather all parties.	US\$75,000	US\$75,000
Component III: Establishment of Trust Fund	Structuring of a trust fund, which sole purpose will be to establish and own CWUIC SP.	US\$50,000	US\$50,000
Component IV: Data collection Dominican Republic and Haiti	Collection of data from water utilities to be used to build the multi-peril risk model.	US\$75,000	US\$75,000
Component V: Knowledge products	Preparation of knowledge products (e.g., document describing the different steps to develop CWUIC SP, compendium of collected data and information on the water utilities.	US\$15,000	US\$15,000
TOTAL	US\$300,000	US\$300,000	US\$300,000

IV. Executing agency and execution structure

- 4.1 The IDB will execute the TC given it is a Research and Dissemination. It will be administered and executed by the Water and Sanitation Division (INE/WSA) in coordination with the Country Department Caribbean Group (CCB) and with the Country Department Central America, Haiti, Mexico, Panama, and the Dominican Republic (CID) as the relevant IDB Country Offices, Departments and Divisions of the IDB Group. The project team will coordinate its work with the respective country offices with respect to reaching out to the relevant ministries and the water utilities. The project team will also coordinate with IDB Invest as appropriate. The project team will request non objection letters from the respective country's government prior to initiating work with the water utility.
- 4.2 Execution and supervision of the TC will be the responsibility of the TC Team Leader who will coordinate with the INE/WSA specialist in each country where activities will be implemented. The monitoring of the TC will be carried out by the project team. The Bank Country Office staff, in those countries where project activities are undertaken,

will support execution by liaising with and monitoring the progress of consultants hired under the project.

- 4.3 The IDB will follow its procurement policies and guidelines related to contracting processes: (i) individual consultants will be hired according to the guidelines established in policy AM-650; (ii) consulting firms of an intellectual nature will be hired according to the "Policy for the selection and contracting of consulting firms for operational work carried out by the Bank" (GN 2765-4) and its Operational Guidelines (OP-1155-4); and (iii) other non-consulting services in accordance with the "IDB Institutional Procurement Policy" (GN 2303 28).

V. Major issues

- 5.1 The main risk associated with this TC includes a low interest/uptake from the water utilities to join CWUIC SP will perform best with a diverse group of policyholders. Without enough policyholders, premiums would need to be higher and the CWUIC SP may not be able to cover operating costs. This risk can be mitigated by: (a) continuing active and direct engagement with water utilities and governments to ensure they understand the benefits of joining CWUIC SP; and (b) starting CWUIC SP with a core group of utilities.

VI. Exceptions to Bank policy

- 6.1 This TC operation does not include any exceptions to Bank policy.

VII. Environmental and Social Strategy

- 7.1 This Technical Cooperation is not intended to finance pre-feasibility or feasibility studies of specific investment projects, or environmental and social studies associated with them; therefore, this TC does not have applicable requirements of the Bank's Environmental and Social Policy Framework (MPAS).

Required Annexes:

[Results Matrix - RG-T4105](#)

[Terms of Reference - RG-T4105](#)

[Procurement Plan - RG-T4105](#)