Investment Grant (IGR) Document

I. Basic Information for IGR

▪ Country/Region:	REGIONAL
▪ TC Name:	Parametric insurance premium support to water utilities in the Caribbean under CWUIC SP
▪ TC Number:	RG-G1045
▪ Team Leader/Members:	Cathala, Corinne (INE/WSA) Team Leader; Cayetano, Evan Stephen (INE/WSA) Alternate Team Leader; Carlos Guiza (INE/WSA); Garcia Merino, Lucio Javier (INE/WSA); Jimenez Mosquera, Javier I. (LEG/SGO); Leslie Crespin (INE/WSA); Lewis, Gilroy Francis (INE/WSA); Nicolas Moreno (ORP/GCM); Oglialoro, Claudia (ORP/GCM); Samtani, Malini Samtani, Malini Oglialoro, Claudia (ORP/GCM); Samtani, Malini
▪ Taxonomy:	
▪ Operation Supported by the TC:	.
▪ Date of TC Abstract authorization:	.
▪ Beneficiary:	Belize, Jamaica, Dominican Republic, Haiti, Guyana, Suriname
▪ Executing Agency and contact name:	Inter-American Development Bank
▪ Donors providing funding:	Cofinancing Special Grants(COF)
▪ IDB Funding Requested:	US$1,877,264.00
▪ Local counterpart funding, if any:	US$0
▪ Disbursement period (which includes Execution period):	48 months
▪ Required start date:	November 2022
▪ Types of consultants:	Consulting firms and consultants
▪ Prepared by Unit:	INE/WSA-Water & Sanitation
▪ Unit of Disbursement Responsibility:	INE/WSA-Water & Sanitation
▪ IGR included in Country Strategy (y/n):	Y
▪ IGR included in CPD (y/n):	N/A
▪ Alignment to the Update to the Institutional Strategy 2020-2023:	Social inclusion and equality; Productivity and innovation; Institutional capacity and rule of law; Environmental sustainability

II. Objectives and Justification of the IGR

2.1 **Context.** Jurisdictions in the Caribbean are vulnerable to natural disasters and experience disproportionate losses.[1] For instance, Hurricane Ivan resulted in an over 200% loss to GDP for the Cayman Islands and Grenada[2] (see Natural disasters in the Caribbean region). 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. The region has experienced approximately US$135 billion in losses from 165 extreme

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

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

weather events, in which most of the losses were due to storms (60%) and floods (29%).[3]

2.2 Floods due to heavy rains or hurricanes in the Caribbean particularly have caused significant damage to the infrastructure and the livelihood of people (e.g., Haiti with Hurricane Matthew in 2016). In 2019, a category 5 hurricane, Hurricane Dorian, hit The Bahamas and caused several billions of dollars in damage, with losses exceeding 25 percent of The Bahamas' GDP.[4] Total damages from a sample of natural disasters in the Caribbean amounted to US$92.5 billion between 2015-2019.[5] Climate research projections estimate that windstorms will increase in intensity, enhancing the potential for substantial damage in the Caribbean. 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.

2.3 Water and sanitation utilities are at the forefront of those weather events. Natural disaster-related damages can prevent the water utility from providing services while also causing the utility to incur losses due to a reduction in its revenues. It typically takes a utility at least two months to restore operations following a category 1 hurricane. As an example, for the Jamaican Water Utility Company (NWC), a one- month disruption in its operations would result in US$32 million losses in revenue, based on annual revenues of US$200 million. Additionally, service disruptions have consequences for sectors that are reliant upon regular services such as hospitals. It is therefore critical for public health reasons, that water utilities restore services to their customers as quickly as possible after a natural disaster strikes.

2.4 Water and wastewater infrastructure include assets above and underground. These assets face different levels of vulnerability to natural disasters and experience different types and levels of damage depending on the type and intensity of the natural disaster event. For example, above ground assets –such as conventional water treatment plants, desalination plants, wastewater treatment plants, pumping stations, water tanks and intakes– are very vulnerable to hurricanes, windstorms, and earthquakes. Ponds and lagoons can be contaminated and are highly vulnerable to flooding. Underground assets –such as water pipes and sewage networks and collectors– on the other hand are very vulnerable to earthquakes and landslides.

2.5 Most utilities lack the financial capacity 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. It is expected that water utilities will face rising costs to repair damage because of the forecasted increases in the intensity and severity of windstorms. In-depth research and surveys of water utilities indicated that the premiums for natural disaster risk insurance to Caribbean water and sanitation utilities were extremely expensive and did not provide the level of coverage desired.[6] Therefore, many utilities cover damages caused by natural disasters with their own resources (self-insurance), meaning that they do not obtain insurance to cover

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3 ECLAC Study, 2010.

4 Inter-American Development Bank November 15, 2019 report.

5 For a subset of natural disasters that have struck the Caribbean in the past 30 years see Natural disasters in the Caribbean region.

6 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.

potential damages from natural disasters. These utilities, as a result, need more and better insurance for natural disasters. This suggests that creating a specific risk pool for water utilities to build economies of scale with diversified geographic risk to cover natural disaster risk would be well supported by reinsurers and could provide additional claims capacity than is currently available.

2.6 **IDB support**. The IDB Group is addressing this issue by leading the support to design a parametric hazard insurance product that could be issued through a segregated portfolio (Caribbean Water Utility Insurance Company–CWUIC SP) within the Caribbean Catastrophe Risk Insurance Facility (CCRIF)[7] SPC, as an alternative for water and sanitation utilities to access hazard insurance on more affordable terms than the insurance policies currently purchased by the utilities. Policies to be offered by CWUIC SP are also expected to be more comprehensive in terms of natural disaster risk coverage. CCRIF SPC[8] is a multi-country risk pool based on parametric insurance where the ultimate beneficiaries are countries from the Caribbean and a utility company, and it is the only entity in the Caribbean which has the appropriate regulatory authorizations to issue such a product.[9] To materialize this support, the Technical Cooperation (TC) operation RG-T4109[10] was approved to assist in the design of certain features of a parametric hazard insurance product to be issued by CWUIC SP to mitigate the effects of natural disasters in the water and sanitation sector in the Caribbean region. As an integral part of this solution, the need to provide premium subsidies to water utilities has been identified. The financing of these subsidy activities will be covered through this Investment Grant operation (IGR).

2.7 One of the major challenges in the wider uptake of risk insurance coverage in low and middle-income countries is the lack of affordability. Making insurance more affordable by subsidizing insurance premiums can thus help countries increase insurance coverage, while reducing premium payments.[11] It has been documented that subsidization of insurance can have a huge impact on the attractiveness of insurance policies for water utilities by reducing the costs to a level that is affordable and build their resilience. Premium subsidies can play a critical role in accelerating uptake and demand of risk insurance. It can provide increased affordability of disaster risk insurance by reducing the cost of insurance premium. In addition, premium subsidies

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7 CCRIF member countries include: (i) in the Caribbean: Anguilla, Antigua y Barbuda, Barbados, Belize, Bermuda, British Virgin Islands, Cayman Islands, Dominica, Grenada, Haiti, Jamaica, Montserrat, St Kitts and Nevis, Saint Lucia, Sint Maarten, St Vincent and the Grenadines, The Bahamas, Trinidad and Tobago and Turks and Caicos Islands; (ii) Central American governments: Guatemala, Nicaragua, and Panama; and (iii) 1 electric utility: Anguilla Electricity Company Ltd.

8 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. CCRIF's operations are executed by six service provider companies under the guidance of the Board of Directors, the Chief Executive Officer, Chief Operations Officer, and Chief Risk Management Officer.

9 CCRIF SPC beneficiaries consist of Caribbean and Central American countries as well as one electric utility.

10 RG-T4109: Structuring of the Caribbean Water Utility Insurance Company (CWUIC SP) as a Segregated Portfolio within CCRIF SPC.

11 World Bank (2017) Sovereign climate and disaster risk pooling. World Bank Technical Contribution to the G20.

can constitute an incentive for water utilities to join CWUIC SP as disaster risk management is new to the sector and requires special incentives.

2.8 For example, for the first three to four years of the operations of CCRIF SPC, the Organization of Eastern Caribbean States (OECS) Catastrophe Risk Insurance Project allowed four countries (Dominica, Grenada, St. Lucia, and St. Vincent and Grenadines) to have access to national and regional IDA financing to cover the cost of entrance fees and insurance premiums. All sovereign catastrophe risk pools have benefited from donor support to start operations and to remain sustainable during their first years.

2.9 **Objective.** The objective of this Investment Grant operation is to finance premium subsidies for public water and sanitation utilities in the Caribbean with the objective of making the insurance premiums more affordable for them. Access to parametric disaster risk insurance will allow the water utilities to restore water services quicker as they will have access to financial resources two weeks after an event occurs.

2.10 **Beneficiaries.** Beneficiaries will include public water and sanitation utilities from Jamaica, Belize, Guyana, Suriname, Haiti, and Dominican Republic. Since it is expected that CWUIC SP will issue a parametric hazard insurance product, water utilities will receive cash payments within a short period of time (about 14 days maximum) after incurring damage. This will enable the utilities to take the measures and investments needed to restore service quickly. Currently, in the absence of this insurance, water utilities do not usually have access to needed cash and, therefore, it may take them substantial time to restore service. Restoring service quickly will likely reduce fatalities and economic costs caused by natural disasters.

2.11 The water utilities of Jamaica (NWC), Belize (BWS), Guyana and Suriname have expressed interest in becoming a member of a structure such as CWUIC SP which may ultimately issue a parametric hazard insurance product.

2.12 The Government of the United Kingdom of Great Britain and Northern Ireland, represented by the Foreign, Commonwealth and Development Office (FCDO)[12] has committed to contribute resources to this IGR operation, as well as the TC RG-T4109, as part of its support to the constitution of CWUIC SP as a segregated portfolio of CCRIF.

2.13 **Lessons learned from the operations of risk pools** include: (i) Risk pooling schemes have benefited from concessional support in the form of direct premium payment for individual countries, capitalization of risk pools with grant finance or interest-free loans; (ii) Direct premium subsidies have the highest impact on reducing the cost of insurance as they do not target a specific makeup of the premium, therefore likely leading to the biggest impact on premium subsidies. Other forms of support, including donor capitalization to reduce the cost of risk capital in the pool, reinsurance support, operational subsidies and general risk reduction measures are likely to have less premium reducing effects; (iii) A good monitoring and evaluation system that tracks the socio-economic outcomes and market development contributions of subsidies is paramount for the success of any subsidized insurance scheme; and (iv) To reduce the risks of donor dependency, premium subsidies open opportunities to introduce complementary activities such as climate resilient and risk

[12] FCDO has supported previous initiatives to support risk pools to provide disaster risk insurance such as the African Risk Capacity Insurance Company (ARC).

reduction programs, adaptation, and resilience investments. While there is still limited experience with the phasing out of subsidies provided by risk pools, considerations will be given to decreasing the level of support over time, which will be discussed with the technical committee members on a case-by-case basis.

2.14 In addition to this financing, other TC operations are supporting the structuring of CWUIC SP, including RG-T3406 (ATN/AC-17265-RG) "Advisory Services to Create the Caribbean Water Utilities Mutual Insurance" in the amount of US$1.05 million, which was originally approved by IDB Invest to conduct feasibility studies for CWUIC; TC RG-T3879 (ATN/SX-18842-RG) "Caribbean Water Utilities Insurance Company (CWUIC)," in the amount of US$739,000 with resources from the Pilot Program for Climate Resilience (PPCR), for the development of CWUIC SP. Furthermore, the TC RG-T4105 (ATN-MA-19464-RG), in the amount of US$300,000, that also complements the activities financed by RG-T4109, such as data collection for additional utilities, training of water utilities and assessment of private sector utilities' participation in CWUIC SP. In addition, the Caribbean Development Bank (CDB)[13] will finance the modeling of multiple perils for water and sanitation utilities in the Caribbean as well as data collection for the Eastern Caribbean countries. The funding sources mentioned above are all complementary and will contribute towards the establishment of CWUIC SP. In addition to these financing, the IDB is exploring funding sources to fund a pilot multi-peril risk model and capitalize CWUIC SP. Capitalization of CWUIC SP is expected to take place in the first quarter of 2023 so CWUIC SP can issue insurance policies for the 2023 hurricane season.[14]

2.15 **Sustainability**. To ensure CWUIC SP's long-term sustainability, the team has already identified several potential donors who focus on supporting the water utility sector in the Caribbean and/or have interests in conservation projects that complement utility resiliency efforts and have referred them to CCRIF SPC for purposes of establishing CWUIC SP. The use of rigorous risk modelling when determining the probability of risks and the required premiums will also be key. Furthermore, CWUIC SP is expected to have solid governance and a lean and efficient structure, like CCRIF SPC.

2.16 **Strategic Alignment**. This IGR operation is consistent with the Second Update to the Institutional Strategy 2020-2023 (AB-3190-2) and is aligned with the development challenges of: (i) *Social Inclusion and Equality*, as it will support disaster and climate change resilience of water utilities, which in turn will be better positioned to restore service to the populations and, in particular to vulnerable populations who are usually the most impacted by natural disasters; and (ii) *Productivity and Innovation*, as it is supporting the structuring of an innovative disaster risk insurance vehicle and adaptation to climate change for water utilities. The IGR is also aligned with the cross-cutting issues of: (i) *Climate Change and Environmental Sustainability*, since this operation will support water utilities in purchasing better coverage to insure against natural disasters; and (ii) *Institutional Capacity and Rule of Law*, as this operation contributes to the sustainability of an insurance vehicle that will provide parametric disaster risk insurance at an affordable cost to water utilities and is expected to contribute to the Corporate Results Framework 2020-2023 (GN-2727-12). In addition, this IGR operation is aligned with the country strategies of the beneficiary countries in

[13] The Caribbean Development Bank is a financial institution that helps Caribbean nations finance social and economic programs in its member countries. CDB signed a Memorandum of Understanding with the IDB in February 2017 to strengthen their ongoing partnership in addressing the Caribbean development priorities.

[14] The hurricane season runs from June 1st till November 30th in the Caribbean region.

that it will support the utilities of those countries in obtaining disaster risk insurance at an affordable cost, which in turn will help them being more resilient to climate change.

2.17 The operation is further aligned with the Sector Strategy "Sustainable Infrastructure for Competitiveness and Inclusive Growth" (OP-1012), 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 (OP-704), by identifying disaster risks, reducing vulnerability and by preventing and mitigating disasters before they occur. Furthermore, this IGR is aligned with the five dimensions defined in the Water and Sanitation Sector Framework Document (SFD) (GN-2781-13), the Support to SME and Financial Access/Supervision SFD (GN-2768-7), and the Climate Change SFD (GN-2835-8). In addition, the operation complies with the objectives of the FCDO fund, which includes the strengthening of resilience and response to crisis.

III. Description of activities/components and budget

3.1 **Component I: Funding for parametric hazard insurance premium support (US$1,753,396).** Resources from this Component will finance premium support to water utilities from the beneficiary countries to make the cost of parametric insurance premiums more affordable to them. Water utilities will apply for funding, which will be reviewed and assess the requests by a technical committee composed by IDB, CCRIF and the Center for Disaster Protection (CDP) staff. The premium subsidies will be allocated to water utilities based on measures of development that are publicly available consisting of the Gross National Income (GNI) per capita and measures of natural hazard Risk (INFORM risk score). The INFORM database includes six natural hazard (earthquakes, floods, Tsunami, tropical cyclone, drought, epidemic) and provides an overall risk score (that also considers vulnerability and coping capacity) as a value between one and ten. It is expected that six water utilities will be assigned subsidies under this IGR.

3.2 **Other costs and IDB Lead Fees (US$123,868).** The resources will finance consulting services to prepare progress reports and a final evaluation. Also, in this item is included the administrative fee of 5% of the contribution (US$93,868) charge by the IDB as IDB lead fees.

3.3 **Budget**. The Government of the United Kingdom of Great Britain and Northern Ireland, represented by the Foreign, Commonwealth and Development Office (FCDO) will finance the total IGR cost of US$1,877,264 through Non-Reimbursable Financing for Specific Projects (PSG). The IGR does not contemplate any local counterpart. The funds will not be utilized to supplement the Bank's administrative budget.

Indicative Budget (US$)

Activity/Component	IDB/FCDO (To be executed by the Bank)	IDB/FCDO To be executed by Water utilities)	Total Funding
Component I: Funding for Parametric Hazard Insurance premium support	0	1,753,396	1,753,396
Progress reports and final evaluation	30,000	0	30,000
Administration Fee (5%)	93,863	0	93,863

TOTAL	**123,863**	**1,753,396**	**1,877,264**

3.4 FCDO will contribute £1,587,443 GBP (US$1,877,264) to this project, based on the exchange rate defined on August 21st, 2022.[15] The final amount of the resources in US dollars will depend on the exchange rate at the time that the Bank receives the funds from the donor and converts them into US dollars. In the event of an adverse fluctuation in the exchange rate that would reduce the amount in US dollars reflected in the budget, the project team will adjust the budget accordingly.

3.5 The Bank will administer the resources of this project in accordance with the "Report on COFABS, Ad-Hoes and CLFGS and a Proposal to Unify Them as Project Specific Grants (PSG)" (SC-114) and will charge a non-reimbursable administration commission of 5% of the FCDO contribution. The commission will be distributed to the Bank's offices that support the administration of the contribution and the execution of the project, through a cost center.

IV. Executing agency and execution structure

4.1 The Bank, through the Water and Sanitation Division (INE/WSA), will be identified temporarily and preliminarily as the executing agency for this operation. Once the water utilities and the amount of subsidy for each one of them have been identified, the water utilities will become the executing agencies under a Grant Agreement that the Bank will enter into with each water utility. The TC execution by the Bank is justified given the regional nature of the operation, the experience and knowledge of the Bank on water and sanitation water utilities and their vulnerability to climate change and the narrow scope of the Bank´s undertaking in the execution of the operation.

4.2 **Technical committee**. Since water utilities will apply for premium subsidies funding, a technical committee will be established for the purpose of reviewing such requests pursuant to the criteria defined in paragraph 3.1. This technical committee will be composed of IDB staff, CCRIF staff, as well as staff from CDP.

4.3 **Grant agreements**. Once the utilities that are grant recipients are identified, as well as the amount of subsidy allocated to each of them, the Bank will execute a Grant Agreement with each utility under which such utility will receive and execute resources under this operation. The grant recipient will require to obtain a letter of request and non-objection from the respective authorities in each of the beneficiary countries.

4.4 A final evaluation will be conducted at the end of the project. FCDO will review the terms of reference for the contracting of this evaluation. INE/WSA will provide FCDO with a reporting schedule for six monthly payments, which will include a report on progress and a financial report on overall spending and commitments and expense projections for the next six months. The project team will be responsible for the preparation and submission to the donor of the project reporting, in compliance with the stipulations of the Administration Agreement. INE/WSA will coordinate the Bank's actions with the Country Department Caribbean Group (CCB), the Country Department Central America, Haiti, Mexico, Panama, and the Dominican Republic (CID), as well as the relevant IDB Country Offices, Departments and Divisions of the IDB Group. Oversight will be conducted by INE/WSA staff, which will receive support

[15] Exchange rate US$/GBP on August 21st: 1US$=0.845576GBP.

from the IDB's Operations Financial Management and Procurement Services Office (VPC/FMP). The monitoring of the TC will be carried out by the project team.

4.5 **Procurement.** The Bank will hire an individual consultant for the preparation of a progress report and final evaluation, and Policy AM-650 will apply. The procurement of Goods, non-consulting services, and consulting services contracted by the grant recipients (Water utilities) in the Beneficiary countries under the investment grant will abide by the Policies for the Procurement of Goods and Works financed by the IDB (GN-2349-15) and the Policies for the Selection and Contracting of Consultants funded by the IDB (GN-2350-15). The unit responsible for disbursements will be INE/WSA.

4.6 The execution period calculated for this project is 48 months.

V. Main Risks

5.1 The main risks associated with this IGR include that some water operators will benefit from premium subsidies on a case-by-case basis. However, those utilities may still have low financial capacity to cover the full insurance premiums in the future. The team will mitigate this risk by designing an exit strategy to phase out the subsidies over time. In addition, the team will include conditions of resilience building and risk preparedness and protection so that the level of premium subsidies decreases over time as the water utilities improve their resilience to climate events.

5.2 CWUIC SP may not be able to attract enough water utilities to cover the full insurance premiums, which would result in a lack of sustainability in the long run. Preliminary discussions with natural disaster insurers and reinsurers suggest that CWUIC SP would garner the greatest amount of support from insurers and reinsurers if there are many members from throughout the Caribbean. That diversity would help sustain CWUIC SP, enabling it, for example, to pay losses whilst also receiving premiums from members who had minimal or no losses. To that end, the team has been keeping all water utilities from the region engaged by organizing webinars and workshops to inform them about the status of CWUIC SP and the insurance products. Additional events with water utilities will be taking place in the second semester of 2022 within the framework of the Caribbean Water and Wastewater Association congress. Lastly, the premiums CWUIC SP can charge will be a key factor for its success.

VI. Exceptions to Bank policy

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

VII. Environmental and Social Strategy

7.1 The Bank will apply the requirements of the environmental and Social Policy Framework (ESPF) and its Environmental and Social Performance Standards (ESPS).

Required Annexes:

Results Matrix - RG-G1045

Terms of Reference - RG-G1045

Procurement Plan - RG-G1045