

**CARIBBEAN DEVELOPMENT BANK**



**AFRICAN CARIBBEAN PACIFIC – EUROPEAN UNION – CARIBBEAN DEVELOPMENT  
BANK – NATURAL DISASTER RISK MANAGEMENT IN CARIFORUM COUNTRIES  
PROGRAMME: PLANNING FOR THE INTEGRATION OF CLIMATE RESILIENCE IN THE  
WATER SECTOR IN THE BORROWING MEMBER COUNTRIES OF THE  
CARIBBEAN DEVELOPMENT BANK - USE OF FUNDS  
(ADDITIONAL FUNDING AND REVISION IN SCOPE) - REGIONAL**

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Considered at the Two Hundred and Eighty-First Meeting  
of the Board of Directors held in Grenada, May 28,2018

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**MAY 2018**

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**CARIBBEAN DEVELOPMENT BANK**

**TWO HUNDRED AND EIGHTY-FIRST MEETING OF THE BOARD OF DIRECTORS**

**TO BE HELD IN GRENADA**

**MAY 28, 2018**

**PAPER BD 23/16 Add. 1**

**AFRICAN CARIBBEAN PACIFIC – EUROPEAN UNION – CARIBBEAN DEVELOPMENT BANK – NATURAL DISASTER RISK MANAGEMENT IN CARIFORUM COUNTRIES PROGRAMME: PLANNING FOR THE INTEGRATION OF CLIMATE RESILIENCE IN THE WATER SECTOR IN THE BORROWING MEMBER COUNTRIES OF THE CARIBBEAN DEVELOPMENT BANK - USE OF FUNDS (ADDITIONAL FUNDING AND REVISION IN SCOPE) - REGIONAL**

**1. BACKGROUND**

1.01 At its Two Hundred and Seventieth Meeting held on March 9, 2016, the Board of Directors (BOD, the Board) of the Caribbean Development Bank (CDB) considered Paper BD 23/16 entitled “African Caribbean Pacific – European Union – Caribbean Development Bank Natural Disaster Risk Management Project Planning for the Integration of Climate Resilience in the Water Sector in the Borrowing Member Countries of the Caribbean Development Bank.” The Board approved the use of funds (UOF) in an amount not exceeding the equivalent of seven hundred and three thousand, three hundred and ninety-five United States dollars (USD703,395) from CDB’s Special Funds Resources (SFR) to fund the following consulting services:

- (a) complete sector-wide climate risk and vulnerability assessment (CRVA);
- (b) assess relevant, policies, plans, strategies legal and regulatory frameworks and proposals to build capacity to implement resilience measures;
- (c) identification of sector investment needs for climate resilience;
- (d) develop an index to measure the level of resilience in the water sector; and
- (e) facilitate regional training and capacity building for all Borrowing Member Countries (BMCs) in an effort to present the tools developed (the Project).

1.02 The expected outcome of the Project is the development of climate resilient sector plans and investment programmes utilising the suite of tools and guidelines developed. This will assist CDB in the preparation of an assessment method/tool for the water sector of its BMCs, hence determining the priority areas of intervention and investment, which should assist in the:

- (a) reduction of vulnerability to long term impacts of natural hazards, including potential impacts of climate change, thereby achieving regional and national sustainable development and poverty reduction goals in BMCs of CDB; and
- (b) strengthening of regional, national and community level capacities, in taking a gender-responsive approach and at the community level of BMCs for mitigation, preparedness, management and coordinated responses to natural hazards and the effects of climate change.

1.03 CDB will also be able to better support its BMCs in the implementation of policies, strategies, projects and programmes geared towards addressing their water sector challenges.

1.04 CDB and the European Union held discussions regarding the use of resources from the African Caribbean Pacific – European Union – Caribbean Development Bank Natural Disaster Risk Management in Cariforum Countries (ACP-EU-CDB NDRM) Programme to support recovery efforts in BMCs affected by Hurricanes Irma and Maria. It was agreed that five hundred thousand Euros (€500,000) from ACP-EU-CDB NDRM could be committed through the amendment of existing contracts to extend current interventions (in the water and road transport sectors) in the affected BMCs.

## **2. IMPLEMENTATION STATUS**

2.01 CDB recruited HR Wallingford of the United Kingdom to undertake the aforementioned consultancy services in the water sector, which commenced on January 2, 2017 and was expected to last for 18 months, but will now be concluded by October 2018. To date, the consultants have held consultations with key stakeholders in the water sector and completed CRVAs in the two selected pilot countries, Grenada and St. Kitts and Nevis. The consultants have engaged regional stakeholders including the Caribbean Water and Sewerage Association; the Caribbean Disaster Emergency Management Agency; the Pan American Health Organization; the Caribbean Institute for Meteorology and Hydrology; and the Centre for Resource Management and Environmental Studies. They have also participated in and made presentations at a number of regional workshops including a Ministerial High Level Forum for the water sector in the Region. The activities being undertaken in the first two pilot countries are complete. The consultants are currently developing the climate resilient index tool and guidance notes. The regional training and capacity building will be scheduled in June 2018.

## **3. VARIATION**

3.01 It is proposed to revise the scope of the Project by increasing, from two to four, the number of countries in which the approaches for mainstreaming resilience in the water sector will be developed and piloted. It is proposed that the additional countries be Dominica and Antigua and Barbuda. The methodology to be adopted in the conduct of the Project would otherwise remain unchanged. It is estimated that the implementation of the Project will be completed by October 2018. The revised Design Monitoring Framework is shown at Appendix 1.

3.02 As in Grenada and St. Kitts and Nevis, the scope of interventions in Dominica and Antigua and Barbuda will be as follows:

- (a) Task 1 – CVRAs;
- (b) Task 2 – Screening of policies, strategies, plans and legislation; and
- (c) Task 3 – Identification of investment needs.

The additional activities to augment existing activities are presented at Appendix 2.

## **4. COST OF ADDITIONAL SERVICES**

4.01 The estimated cost of the additional services is three hundred thousand Euros (€300,000) and a summary of the costs is shown at Table 1. The approach used for Grenada and St. Kitts and Nevis will be applied in Dominica and Antigua and Barbuda. This would allow for a successful transition to a low-carbon climate-resilient and gender-sensitive development path for the water sector in the beneficiary BMCs.

**TABLE 1: REVISED SUMMARY FINANCING PLAN**

<b>Budget Cost</b>	<b>USD</b>	<b>Euro (€)</b>
Original	703,395	586,162
Additional	360,000	300,000
<b>Revised Total</b>	<b>1,063,395</b>	<b>886,162</b>

4.02 CDB’s UOF in an amount not exceeding the equivalent of three hundred thousand Euros (€300,000), is eligible for financing from CDB’s Special Funds Resources (SFR/OSF) ACP-EU-CDB NDRM. Appendix 3 illustrates the proposed budget for the activities to be undertaken.

## **5. JUSTIFICATION**

5.01 The 2017 hurricane season has been one of the most active, with many countries experiencing the impact of 2 Category 5 hurricanes in the month of September. On September 6, 2017, Hurricane Irma, with maximum sustained winds of 185 miles per hour (mph)/295 kilometres per hour (km/h) which devastated islands in the Region including Antigua and Barbuda. On September 18, 2017, Hurricane Maria passed over Dominica, resulting in catastrophic damage to all infrastructure and environmental resources (in particular to water supplies and road infrastructure).

5.02 Water supply and sanitation are critical for human well-being and survival, especially post weather events. There is a need to increase the resiliency of such critical infrastructure to reduce the potential impacts of climate shocks. The provision of clean and safe drinking water, the burden of disease prevention and waste management are issues that are pivotal to the recovery efforts in the affected countries. The activities to be initiated would assist the countries in their medium and long-term planning for the redevelopment of the water sector. The current state of the sector in the affected countries offers a unique opportunity to demonstrate the benefits of the overall Project in support of the introduction of climate resilience in the redevelopment of the water sector.

## **6. PROCUREMENT**

6.01 Procurement of CDB-financed consultancy services shall be in accordance with CDB’s procurement procedures with respect to its UOF.

## **7. RECOMMENDATION**

7.01 It is recommended that, with respect to the UOF approved by BOD at its Two Hundred and Seventieth Meeting held on March 9, 2016, pursuant to Paper BD 23/16 entitled “African Caribbean Pacific – European Union – Caribbean Development Bank Natural Disaster Risk Management Project Planning for the Integration of Climate Resilience in the Water Sector in the Borrowing Member Countries of the Caribbean Development Bank,” BOD approve additional funding by way of UOF in an amount not exceeding the equivalent of three hundred thousand Euros (€300,000) from CDB’s SFR/OSF ACP-EU-CDB NDRM to permit the financing of the revision in the scope of the Project described in paragraph 3 above so as to increase from 2 to 4 the number of BMCs in which the approaches for mainstreaming resilience in the water sector under the Project will be developed and piloted.

**SUPPORTING DOCUMENTATION**

- Appendix 1 - Revised Design Monitoring Framework
- Appendix 2 - Additional Activities to Original Scope of Works for Dominica and Antigua and Barbuda
- Appendix 3 - Revised Budget

**REVISED DESIGN MONITORING FRAMEWORK**

<b>Design Summary</b>	<b>Performance Targets / Indicators</b>	<b>Data Sources / Reporting Mechanisms</b>	<b>Assumptions/ Accountabilities</b>
<p><b><u>IMPACT:</u></b></p> <ol style="list-style-type: none"> <li>BMCs Water Sector operational risks associated with climate change reduced.</li> <li>Optimal investments made towards improving the efficiency and resilience of water sector in BMCs.</li> </ol>	<ol style="list-style-type: none"> <li>60% of BMC's systems are able to resume operations following an extreme weather event in less than seven days. (Baseline: to be determined).</li> <li>Number of climate change designs enhanced investment actions by BMCs supported by International Financial Institutions.</li> </ol>	BMC's Annual Reports.	Resources are available to implement recommended actions.
<p><b><u>OUTCOME:</u></b></p> <ol style="list-style-type: none"> <li>Improve capacity of BMCs to identify plan and implement climate resilient low-carbon gender-sensitive development path for water sector to manage disaster risk and the impacts of climate change</li> <li>Climate resilient sector plans and investment programmes using suite of technical resources developed.</li> </ol>	<ol style="list-style-type: none"> <li>100% submissions from four pilot BMCs reflect adopted practices influenced by the tool index. (Pilot – Grenada, St. Kitts and Nevis, Antigua and Barbuda, and Dominica)</li> <li>At least 80% of participants who attended workshop have indicated that they are confident in their ability to use the tool index.</li> </ol>	<ol style="list-style-type: none"> <li>Review of BMCs' financing request and supporting documentation.</li> <li>Workshop feedback.</li> </ol>	
<p><b><u>OUTPUTS:</u></b></p> <ol style="list-style-type: none"> <li>Identification of activities and investment options (5 – 10-year projected period) to provide a reliable and resilient water supply service to four selected BMCs.</li> <li>Investment Plan for the Water Sector of two BMCs with identified sources of funding.</li> <li>The preparation of a package of materials (tool index) that would provide guidance in building resilience in the water sector of the BMCs of the CDB.</li> </ol>	Investment Plan completed with sources of funding identified by May 31, 2018.	<ol style="list-style-type: none"> <li>Consultant's reports.</li> <li>CDB Supervision Reports</li> </ol>	BMCs provide the necessary source of funding to meet investment requirements;
	<b>USD</b>		
<b>ORIGINAL BUDGET</b>	<b>CDB (SFR)</b>	<b>Total</b>	<ol style="list-style-type: none"> <li>Consultants selected and engaged.</li> <li>CDB supervision reports.</li> <li>CDB disbursement records.</li> </ol> Counterpart contribution (in-kind) available in a timely manner.
<b>Consultancy Services:</b>	<b>703,395</b>	<b>703,395</b>	
<b><u>ADDITIONAL BUDGET</u></b>			
<b>Consultancy Services:</b>	<b>360,000</b>	<b>360,000</b>	
<b>Additional Total €</b>	<b>300,000</b>	<b>300,000</b>	

**ADDITIONAL ACTIVITIES TO ORIGINAL SCOPE OF WORKS  
FOR DOMINICA AND ANTIGUA AND BARBUDA**

**OBJECTIVES**

1. The overall objective is to arrive at prioritised investment plans subsequent to the following activities: (a) a CRVA; (b) screening of policies, plans and legislation; and (c) preparation of an investment plan. These activities will take into account of levels of loss and damage as a result Hurricanes Irma and Maria. The investment plans will focus on building back and enhancing resilience in the future.
2. Specific objectives for each pilot country include:
  - (a) the characterisation of the water systems, to understand current and future risks from climate variability and change and to identify potential measures to improve climate resilience, including lessons learned from extreme weather such as the recent hurricane events;
  - (b) the assessment of policies, plans, strategies, legal and regulatory frameworks with regards to their strengths and weaknesses in promoting and enhancing climate resilience in the sector; and
  - (c) the preparation of a prioritised list of investments, and potential funding sources, based on options analysis and multi-criteria evaluation.
3. These activities will benefit from the tools and approaches piloted in the earlier case studies (in Grenada and St. Kitts and Nevis) and will demonstrate the benefits and applicability of such tools and approaches amongst other BMCs.
4. The proposed activities include:
  - (a) inception mission and initial engagement with country stakeholders;
  - (b) country missions and field visits to critical water systems and infrastructure;
  - (c) review of loss and damage assessments from recent hurricane events;
  - (d) undertake CRVA analysis (as appropriate to the country context);
  - (e) screening of policies, strategies, plans and legislation;
  - (f) identification of options to ‘build back better’ and to enhance climate resilience;
  - (g) multi-criteria evaluation of options; and
  - (h) preparation of a prioritised investment plan.



**REVISED BUDGET**  
**(USD)**

<b>Item</b>	<b>CDB (SFR)</b>	<b>Total</b>
<b><u>ORIGINAL BUDGET</u></b>		
Activities/Inputs		
<b>Consultancy Services:</b>	<b>703,395</b>	<b>703,395</b>
<b><u>ADDITIONAL BUDGET</u></b>		
Activities/Inputs		
<b>Consultancy Services:</b>	<b>360,000</b>	<b>360,000</b>
<b>Revised Total Project Costs</b>	<b>1,063,395</b>	<b>1,063,395</b>
<b>Additional Funding Total €</b>	<b>300,000</b>	<b>300,000</b>