CARIBBEAN DEVELOPMENT BANK



TECHNICAL ASSISTANCE - PREPARATION OF THE STATE OF THE CARIBBEAN CLIMATE REPORT 2016: INFORMATION FOR RESILIENCE BUILDING REGIONAL

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Considered at the Two Hundred and Seventy-Fifth Meeting of the Board of Directors on March 16, 2017

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CARIBBEAN DEVELOPMENT BANK

TWO HUNDRED AND SEVENTY-FIFTH MEETING OF THE BOARD OF DIRECTORS TO BE HELD IN BARBADOS

MARCH 16, 2017

PAPER BD 6/17

TECHNICAL ASSISTANCE - PREPARATION OF THE STATE OF THE CARIBBEAN CLIMATE REPORT 2016: INFORMATION FOR RESILIENCE BUILDING - REGIONAL

1. <u>BACKGROUND</u>

1.01 In 1994, the Climate Studies Group Mona (CSGM) was formed within the Department of Physics at the University of the West Indies (UWI), Mona. The mission of CSGM is (a) to investigate and understand the mechanisms responsible for the mean climate and extremes in climate in both Jamaica and the wider Caribbean; (b) to use this understanding to predict climate on a seasonal and annual basis; (c) to promote awareness of global warming; (d) to determine how anthropogenic climate change (CC) will manifest itself in the Caribbean region; (e) to investigate the potential for exploiting renewable energy resources; and (f) to investigate and promote the advantageous uses of climate prediction in socio-economic sectors. CSGM comprises faculty members, consultants, technical staff and postgraduate students, all working together to understand local, regional and global climate. CSGM has contributed to a number of publications on CC.

1.02 CSGM has been conducting cutting-edge climate research since 1994, including modelling past and future impacts of CC on the Caribbean region. CSGM is now a leading authority on climate science in the Region. It has a history of collaborative research with regional institutions such as the Caribbean Institute for Meteorology and Hydrology (CIMH), Instituto de Meterologia (Cuba) and the Caribbean Community Climate Change Centre (CCCCC), all of which have been actively working on climate modelling, applied climate research and the expansion of operational climate services. Together their work has helped to support and inform decision-making for both policy and related climate action work programmes in the Borrowing Member Countries (BMCs) of the Caribbean Development Bank (CDB). In 2007, three scientists from the UWI including Professor Anthony Chen who established CSGM shared the Nobel Peace Prize awarded to the Inter-governmental Panel on Climate Change (IPCC) for their contribution to climate research.

1.03 The Mona Office for Research and Innovation (MORI), was established as part of the Principal's Office of UWI to contribute to the responsible stewardship of the Campus' academic and intellectual assets by means of strategic investments in research initiatives, and by creation of a sustainable programme of development and research. In-keeping with this mandate, MORI helps UWI researchers to identify funding opportunities and generally provide administrative support for research initiatives.

1.04 On December 12, 2013, at its Two Hundred and Fifty-Ninth Meeting, the Board of Directors considered Paper BD 80/13 and approved entry, by CDB, into an agreement with the European Union (EU) for CDB to execute projects within the African Caribbean Pacific (ACP)-EU Natural Disaster Risk

Management (NDRM) Programme in the CARIFORUM countries¹. The Contribution Agreement² between CDB and the EU was signed in July 2014. The objective of the Programme is to reduce vulnerability to long-term impacts of hydro-meteorological and geological natural hazards, including potential impacts of CC. It is expected that this will contribute to the achievement of regional and national sustainable development and poverty reduction goals in the CARIFORUM³ countries. CDB, Caribbean Disaster Emergency Management Agency and the Government of the Dominican Republic (DR) are the Implementing Agencies contracted by the EU, each with responsibility for the implementation of various activities and the achievement of agreed results. Among the expected results (Result 2) of the programme is Local, National, and Regional Resilience Enhanced through Strengthened Early Warning, National Risk Profiling and Community-Based Disaster Risk Reduction (DRR). CDB has responsibility for the achievement of this result.

1.05 IPCC has reported scientific evidence of global warming resulting from human activities that contribute to increasing concentrations of greenhouse gases in the atmosphere. An unprecedented rate of warming of the climate system has been observed since 1950 in comparison with previous decades and millennia⁴. In the Northern Hemisphere, the period 1983 - 2012 was the warmest 30-year period of the last 1,400 years. Although the Small Island Developing States (SIDS) including those in the Caribbean contribute minimally (less than one percent) to global emissions, they are among the most vulnerable countries to the impacts of climate variability and climate change (CVC). Their vulnerability is due to high exposure of the population and infrastructure to multiple hazards, population poverty and inequality, and accelerated urbanisation and environmental degradation.

1.06 Hydro-meteorological and hydro-climatic events represent the most frequently occurring hazards in the Caribbean and collectively produce some of the most significant negative socio-economic and environmental impacts in the Region. Some examples include (a) Hurricane Tomas in 2010 with losses in Saint Lucia amounting to USD336.2 million (mn); and (b) Hurricane Erika in 2015 which caused USD483 mn in losses in Dominica, with more than 30 persons either confirmed dead or missing and significant numbers of persons displaced. For the period of 1990-2016, the estimated total cost of disasters resulting from natural hazards was USD13.5 billion (bn): USD8.6 bn in Haiti, USD2.7 bn in Bahamas, USD1.6 bn in Jamaica and USD0.6 bn in Belize⁵. In many SIDS, CVC is resulting in loss in arable land due to increased salinisation of soils and a decrease in water availability⁶. Under an intermediate lowemissions scenario, projections for the Caribbean region are for an average annual increase in surface temperature of 1.2–2.3°C, a decrease in rainfall of about 5–6% and a sea level rise of 0.5–0.6 metres by the end of the century. By mid-century, the impacts of CC on many small Caribbean islands will lead to decreased water resource availability, and there will be insufficient water to meet demand during lowrainfall periods. Sea level rise could also exacerbate coastal flooding, thus negatively affecting critical infrastructure and natural resources supporting agriculture and fishing livelihoods.⁷

1.07 In response to global warming concerns and the vulnerability and potential impacts of CC on the SIDS, the Alliance of Small Island States and the Caribbean Community (CARICOM) at the 21st session of the Conference of the Parties to the United Nations Framework Convention on Climate Change in 2015,

¹ https://ec.europa.eu/europeaid/sites/devco/files/aap-acp-action-fiche-20131010_en.pdf [accessed April 19, 2015].

² The EU Contribution Agreement with the CDB for ACP-EU-CDB NDRM in CARIFORUM Countries.

³ The Forum of the Caribbean Group of ACP States (CARIFORUM) is the body that comprises Caribbean ACP States for the purpose of promoting and coordinating policy dialogue, cooperation and regional integration.

http://caricom.org/jsp/community_organs/cariforum/cariforum_main_page.jsp?menu=cob.

⁴ IPCC, 2014. The IPCC's Fifth Assessment Report, What's in it for SIDS?

⁵ http://www.emdat.be/database.

⁶ IPCC, 2014: Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, R.K. Pachauri and L.A. Meyer (eds.)]. IPCC, Geneva, Switzerland, 151 pp.

⁷ IPCC, 2007: Climate Change 2007: Synthesis Report. Contribution of Working Groups I, II and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, Pachauri, R.K and Reisinger, A. (eds.)]. IPCC, Geneva, Switzerland, 104 pp.

advocated "to hold the increase in global average temperature to below 1.5°C above pre-industrial levels" as the long-term temperature goal. The ensuing Paris Agreement includes language which takes account of the 1.5 °C above pre-industrial levels option. Ratification of the Paris Agreement obligates the Parties to prepare and communicate their Nationally Determined Contributions (NDCs), outlining national climate plans for greenhouse gas emission reduction, including mitigation and adaptation actions towards the achievement of the Agreement. A review of the indicative NDCs of BMCs show a focus on policy and programmes that will support climate resilience action in climate sensitive sectors; energy, agriculture, tourism, water, forestry and transportation.

1.08 Information on CVC that targets a non-scientific audience is not readily available. A number of general assessment reports for the Caribbean currently exist, but there are limitations to their use for a range of reasons; (a) many exist in peer reviewed literature and are not easily accessible by decision makers; (b) often they are too technical in scope and not suited for policy makers; (c) the projections used, often rely on general circulation models which are too coarse to provide information at suitable spatial scales given the small size of many BMCs; (d) CV is not taken into account; and (e) CC projections are premised on Special Report on Emissions Scenarios (SRES) and not the newer more accurate Representative Concentration Pathways⁸. CC is heavily science-based which often thwarts or distracts from the delivery of key messages that are useful for decision-makers. Even when a good grasp of the scientific concepts is achieved, the reorientation of thought as to how to make that understanding applicable to relevant plans and policies is still not easily realised. Thus, climate-focused education and training programmes to key actors in climate sensitive sectors can help them comprehend the causes and impacts of CVC on their sectors and take informed climate change adaptation (CCA) decisions.

1.09 In 2012, CSGM published a report titled "State of the Jamaican Climate 2012: Information for Resilience Building". The report provided a detailed description of Jamaica's climate, its variability, trends and future projections. It has served as the initial reference source used by key sectors and organisations working on the development and implementation of Jamaica's climate resilience work programme. Given the success of this initiative and in response to requests from other BMCs for similar country reports, CSGM proposes to prepare a state of the region climate report that will cover CDB's 19 BMCs⁹.

1.10 The "State of the Caribbean Climate Report" will be used to conduct interactive "Climate SMART Series" workshops focusing on (a) building knowledge and awareness on CC and its impacts on climate sensitive sectors through the delivery of interactive "Climate SMART Series" workshops to relevant regional organisations and key governmental representatives within CDB's BMCs; and (b) guiding the BMCs to effectively use the data in the State of the Caribbean Climate Report to assess the effects of CVC on specific sectors and integrate climate data into development planning and strategies. The workshops will also be captured via video and hosted permanently on the online platform previously developed for the "State of the Caribbean Climate Report". CSGM will also update the report every four years and maintain an online forum where participants can ask questions and exchange on relevant topics.

1.11 CSGM has conceptualised a highly interactive "Climate SMART Series" workshop which moves the non-scientist through the basics of CC, and builds on that understanding to engage the participant in a reorientation of attitudes to CC and pave the way for accelerating translation of climate science knowledge into effective policies for climate resilience. Two of these workshops have been held to date on request from partners, with overwhelmingly positive feedback from participants - Jamaica (July 2014 in

⁸ The RCP scenarios explore the impact of different climate policies in addition to the no-climate-policy scenarios explored by SRES. In addition, CO₂-equivalent concentrations are used as the primary product of the RCPs, unlike CO₂-equivalent emissions used for the SRES. Thus, the RCP scenarios are more accurate and relevant for decision-making processes than the SRES.

⁹ Anguilla, Antigua and Barbuda, Barbados, Belize, British Virgin Islands, Cayman Islands, Dominica, Grenada, Guyana, Haiti, Jamaica, Montserrat, St Kitts and Nevis, Saint Lucia, St Vincent and the Grenadines, Suriname, The Bahamas, Trinidad and Tobago, Turks and Caicos Islands.

conjunction with the Planning Institute of Jamaica) and in the United States Virgin Islands (January 2016 in conjunction with the University of the Virgin Islands). The "Climate SMART Series" workshops include many sessions to (a) increase participants' knowledge of the basic science of CC and how the changes are manifesting in the Region; (b) complete group activities to assess the vulnerability of climate sensitive sectors to CVC and discuss the multiple impacts and consequences of CVC to these sectors; and (c) discuss climate adaptation strategies to build sectoral resilience to CVC. For instance, the attendees participate in a group activity where each group sets a goal, such as ensuring safe and adequate water for island residents, and then will assess how to achieve it while factoring in the potential effects of climate change.

2. <u>PROPOSAL</u>

2.01 By letter dated September 16, 2016, UWI Mona requested support to finance the preparation of a report "State of the Caribbean Climate, 2016: Information for Resilience Building" (the Report). The Report will provide updated and reliable climate data including observed climate variability (CV) and trends, recent extreme climatic events and impacts, a compilation of potential impacts of CC for climate sensitive sectors and the value of climate information. The Report will be made available in both print and electronic copy and distributed to key regional inter-governmental organisations, financial institutions, funding agencies and national decision-makers in key climate sensitive sectors including: agriculture, energy, water, forestry, tourism and transportation. The outline of the Report is shown at Appendix 1A. Upon completion of the report, technical persons and decision-makers in key climate sensitive sectors in selected pilot BMCs will participate in Climate Smart Series Workshops to increase knowledge and awareness of the impacts of CVC and develop sound climate resilience strategies. The agenda of the workshop is shown at Appendix 1B.

2.02 It is proposed that CDB provide a grant to UWI in an amount not exceeding the equivalent of four hundred and forty-five thousand and fifty-six Euros (EUR445,056) from its Special Funds Resources (SFR) to assist with financing services to support the preparation, production and dissemination of the Report, and to conduct the Climate Smart Series Workshops. The grant will provide resources to:

- (a) gather and analyse climate data;
- (b) design and establish a webpage to share the Report, and other related regional climate data/documents;
- (c) conduct 2 two-day validation workshops in Jamaica and Saint Lucia with targeted end users;
- (d) prepare and produce the Report (graphic design, production of 100 hardcopies and 100 soft copies) inclusive of a non-technical summary document for decision makers;
- (e) present the Report to CDB;
- (f) conduct three interactive "Climate SMART Series" workshops in pilot BMCs (Bahamas, Antigua and Guyana) with representatives of key climate sensitive sectors to increase knowledge and awareness on CC science and its impacts and to develop a multi-sectoral CCA road map of actions;
- (g) capture digitally the workshop via video and package the main material for distribution online via the existing platform for the State of the Caribbean Climate Report; and

(h) promote project visibility including *inter-alia* coverage of validation and interactive Climate Smart Series Workshops, in accordance with Annex 1, Section 1.13 and Annex 2 Article 6 of the ACP-EU-CDB NDRM Contribution Agreement.

2.03 The draft Terms of Reference (TOR) for the consultancy services assignments is presented at Appendices 2A to 2C.

3. <u>OUTCOME</u>

3.01 The expected outcome is increased awareness about, and use of, updated and reliable climate data in BMCs. The design monitoring framework of the proposal is provided at Appendix 3, and the Work Implementation Schedule at Appendix 4.

4. <u>JUSTIFICATION</u>

4.01 In the Caribbean region, extreme weather and climatic events have already caused serious economic losses in climate sensitive sectors. Climate predictions indicate that CVC will continue to threaten the Caribbean region's economy, growth and aspirations for sustainable development. The potential total costs of damage and losses for BMCs due to the increased frequency and intensity of hurricanes and tropical storms is projected at USD22 bn annually by 2050 in a scenario of global inaction to CC^{10} .

4.02 BMCs need a comprehensive 'first-stop' reference report that is relevant in scale and current in value. This report will provide a state of the knowledge account of CVC on which actionable recommendations to improve the Region's resilience at all levels and for the critical climate sensitive sectors.

4.03 Climate data is not consistently used for decision-making, although the production and availability of this data has substantially improved over the last decade. It is often assumed that decision-makers understand CVC and know how and where to access climate information and data. However, many decision-makers have minimal knowledge of CVC and are often unware of the available climate information sources. In addition, while some may show interest in CC issues it is often perceived as highly technical and academic. Therefore increasing basic knowledge and understanding of CVC by key decision-makers is critical to facilitate evidence-based policy and investment actions.

4.04 The "Climate Smart Series" workshops will be directed at operationalising the State of the Caribbean Climate Report. Participants will use the Report to prepare a multi-sectoral road map for action to address the impacts of CVC on climate sensitive sectors. This will be useful for BMCs in the preparation of their NDCs.

4.05 Digitally capturing the workshop and packaging of the workshop material for distribution online will allow for anytime access to the information. An outcome of the workshop will be the preparation of a multi-sectoral CCA road map of actions.

4.06 The Report along with the interactive "Climate Smart Series" Workshops will increase CVC knowledge and awareness of strategic partners in BMCs and help them to develop realistic mitigation and adaptation actions, particularly for NDCs focal areas such as energy, transport, forestry, water and agriculture. It is expected that eight entities in BMCs will use the report for DRR and CCA strategic plans

¹⁰ Bueno et al. 2008. The Caribbean and Climate Change: The Cost of Inaction. Stockholm Environment Institute- United States Center Global Development and Environment Institute, Tufts University, May 2008.

and work programme development by August 2019, which will contribute to increasing the resilience of vulnerable BMC communities to natural disasters.

4.07 Based on CDB's Performance Rating System, the Project has been assessed as satisfactory with an overall score of 3.25. A summary of the Project performance score is shown in Table 1, and Appendix 5 shows the details of the rating system.

| Criteria | Relevance | Effectiveness | Efficiency | Sustainability | Overall Score Satisfactory |
|----------|-----------|---------------|------------|----------------|-------------------------------|
| Score | 4 | 3 | 3 | 3 | 3.25 |

TABLE 1: PROJECT PERFORMANCE SCORE SUMMARY

4.08 Based on CDB Gender Marker, the proposed Project is assessed as having no contribution to gender equality (NO). Nonetheless, the State of the Caribbean Climate Report will provide updated and reliable climate data to inform decision-making, awareness and advocacy, and provide a basis to help women and men build and protect their assets and improve their quality of life. The gender marker summary is shown in Table 2, and the details are reported at Appendix 6.

TABLE 2: GENDER MARKER SUMMARY

| Gender Marker | Analysis | Design | Implementation | Monitoring and Evaluation | Score | Code |
|---------------|----------|--------|----------------|------------------------------|-------|------|
| | 0 | 0 | 0 | 0.5 | 0.5 | NO |

4.09 The proposed Project is consistent with CDB's Climate Resilience Strategy and the ACP-EU-CDB Result Areas 2: Improved local, national and regional resilience through strengthened early warning, national risk profiling and community-based DRR and CCA. It is also consistent with:

- (a) CDB Strategic Objectives of: (i) supporting environmental sustainability and DRR; and (ii) promoting good governance, regional cooperation and integration; and
- (b) CDB Corporate Priorities of: (i) promoting disaster risk management and CC mitigation and adaptation; and (ii) improved protection and sustainable management of natural resources.

5. <u>EXECUTION</u>

5.01 The Project will be executed by UWI, Mona Campus. In executing the Project, UWI will do so primarily through the following offices/units:

- (a) CSGM will have direct responsibility for technical implementation of the Project including overseeing data collection and analysis, determining methodology to be used for scenario modelling, leading the validation workshops, producing the Report and the non-technical document summary, preparing the interactive workshop materials and facilitating the workshops;
- (b) the Special Projects Unit will have responsibility for managing the financial resources of the Project; and

(c) MORI will provide administrative support for the project implementation with respect to coordination of the two validation workshops and the three in-country interactive Climate SMART Series Workshops and manage the engagement of the technical assistants and the webpage consultant.

5.02 As a condition precedent to first disbursement, UWI will assign a senior staff member of CSGM as the Project Coordinator (PC). The PC will be directly responsible for coordinating the execution of all Project activities, ensuring Project technical supervision and the quality of deliverables. A TOR detailing the Scope of Work to be performed by the PC is presented at Appendix 2A. The qualifications and experience of the PC and of any person subsequently assigned to the position of the PC shall be acceptable to CDB.

5.03 The two main collaborating partners are CIMH and CCCCC. CIMH will provide regional climate data and lead the preparation of two chapters of the report. CIMH is the regional training and research organisation focusing on meteorology, climatology, hydrology, and agro-meteorology in the Caribbean. CCCCC will be responsible for providing relevant climate data, information and feedback as required by CSGM. CCCCC has responsibility for coordination of the Caribbean Regional Climate Strategy and Implementation Plan. Both CIMH and CCCCC will serve as facilitators in the validation workshops and implementation of the Project. Letters of commitment from CIMH and CCCCC are provided at Appendices 7A and 7B.

5.04 Post-graduate students will be engaged to undertake data gathering and analysis, and to assist with the preparation of the draft technical report, under the supervision of the PC. The students to be engaged will have previously worked on a similar assignment.

5.05 The draft report will be presented at 2 two–day validation workshops in Jamaica and Saint Lucia. The workshops will bring together key regional organisations and technical governmental representatives from climate sensitive sectors (agriculture, water resources, works and infrastructure sectors), to discuss the content and usefulness of the Report for their sectors and work programmes.

5.06 Three 3-day interactive "Climate SMART Series" workshops will be undertaken in Antigua, Bahamas, and Guyana. These workshops will bring together relevant technical persons and decision-makers from regional organisations and governmental representatives from climate sensitive sectors (agriculture, water resources, tourism, energy and transportation), to build the ground knowledge of CC and its impacts on the Caribbean and discuss suitable case-by-case CCA strategies.

6. <u>RISK ASSESSMENT AND MITIGATION</u>

6.01 The identified risks have been classified according to their relevance to the implementation and operational phases of the Project. Table 3 summarises these risks and potential mitigation measures to address them.

TABLE 3: POTENTIAL RISKS AND MITIGATION MEASURES

| Type of Risk | Description of Risk | Mitigation Measures | |
|----------------|--|---|-----|
| Implementation | Data/information is not provided in a timely manner. | Partners were engaged at the initial stage and agreed a committed to the Project design and implementati schedule. | |
| Operation | Low interest in the interactive Climate Smart Series Workshops and in | (a) UWI and CDB will encourage national and region leaders and stakeholders to make use of the report a workshop materials. | ind |
| | the use of the Report. | (b) UWI and CDB will maintain an online forum for gro discussions on specific topics regularly. | up |

7. <u>COST AND FINANCING</u>

7.01 The total cost of the Project is estimated at five hundred and sixty-eight thousand three hundred and thirty-nine Euros (EUR568,339). The Financing Plan is summarised in Table 4 and the detailed budget is shown at Appendix 8.

| Contributors | EUR | % |
|---------------------------|---------|-----|
| CDB | 445,056 | 78 |
| UWI, CIMH, CCCC (In-kind) | 123,283 | 22 |
| TOTAL | 568,339 | 100 |

TABLE 4: <u>SUMMARY OF FINANCING PLAN</u>

8. **FUNDING SOURCE**

8.01 CDB grant to UWI of an amount in the equivalent of EUR445,056 is eligible for financing from CDB SFR allocated from resources provided under the ACP-EU-CDB NDRM in the CARIFORUM Countries Programme. Funds are available within existing resources.

9. <u>PROCUREMENT</u>

9.01 Procurement shall be in accordance with the CDB Guidelines for Procurement (January 2006), for goods, works and non-consultancy services, and the CDB Guidelines for the Selection and Engagement of Consultants (October 2011) for consultancy services. Financing shall be provided under the ACP-EU-CDB NDRM in CARIFORUM Countries agreement and thus, in accordance with that agreement, eligibility shall be extended to countries which are eligible for procurement under EU-funded projects, which are not CDB member countries, in accordance with the EU Eligibility Rules set out in Appendix 9.

10. <u>REPORTING</u>

10.01 UWI will be required to submit to CDB, in form and substance acceptable to CDB, the reports described at Appendix 2A.

11. <u>RECOMMENDATION</u>

11.01 It is recommended that CDB make a grant to UWI of an amount not exceeding the equivalent of four hundred and forty-five thousand and fifty-six Euros (EUR445,056) (the Grant), from CDB's SFR to assist UWI in financing the preparation of the State of Caribbean Climate Report, 2016: Information for Resilience Building, and a non-technical summary report (the Project) on CDB's standard terms and conditions, and on the following terms and conditions:

(1) **Disbursement**:

Except as CDB may otherwise agree, and subject to paragraph (b) below, payment of the Grant shall be made as follows:

- (a) an amount not exceeding the equivalent of one hundred and thirty-three thousand five hundred and seventeen Euros (EUR133,517) of the Grant shall be paid as an advance (the Advance) on account of expenditures in respect of the Grant, following receipt by CDB of:
 - (i) a request in writing from UWI for such funds; and
 - (ii) evidence acceptable to CDB, that the condition precedent to first disbursement of the Grant set out in sub-paragraph (3) below has been satisfied; and
- (b) the balance of the Grant shall be paid periodically, by way of further advances (each, a subsequent advance), on account of expenditure in respect of the Project, following receipt by CDB of an account and documentation satisfactory to CDB with respect to each preceding advance, provided however, that CDB shall not be under any obligation to make:
 - (i) the first such subsequent advance until CDB shall have received an account and documentation satisfactory to CDB, in support of expenditures incurred by UWI with respect to the Advance;
 - (ii) any subsequent advance until CDB shall have received the requisite number of copies of the reports, in form and substance acceptable to CDB, to be furnished for the time being by UWI and the PC, in accordance with the TOR set out at Appendix 2A; and
 - (iii) payments exceeding the equivalent of four hundred thousand five hundred and fifty Euros (EUR400,550) representing ninety percent (90%) of the Grant until CDB shall have received the requisite number of copies of the final report in form and substance acceptable to CDB, required to be furnished by UWI and the PC in accordance with the TOR set out at Appendix 2A and a certified statement of the expenditures incurred in respect of, and in connection with, the Project.

(2) **Period of Disbursement**:

The first payment of the Grant shall be made by May 15, 2017, and the Grant shall be fully disbursed by October 31, 2018, or such later dates as CDB may specify in writing.

(3) **Condition Precedent to First Disbursement of the Grant**:

The PC referred to in sub-paragraph (5)(a)(i) below shall have been assigned.

(4) **Procurement**:

- (a) Except as provided in sub-paragraph (b) below, procurement shall be in accordance with the procedures set out and/or referred to in the Grant Agreement between CDB and UWI, or such other procedures as CDB may from time to time specify in writing. The Procurement Plan approved by CDB is set out at Appendix 10. Any revisions to the Procurement Plan shall require CDB prior approval in writing.
- (b) In order to comply with the requirements of the ACP-EU-CDB NDRM in CARIFORUM Countries contribution agreement, country eligibility shall be extended to countries which are eligible for procurement under EU-funded projects, which are not CDB member countries.

(5) **Other Conditions**:

- (a) UWI shall:
 - (i) assign a member of its staff as PC who shall be responsible for coordinating the implementation of the Project, including the carrying out of the functions described in the TOR set out at Appendix 2A. The qualifications and experience of any person subsequently appointed as PC shall be acceptable to CDB;
 - (ii) in accordance with the procurement procedures applicable to the Grant select and engage consultants to carry out the services set out in the TORs at Appendices 2B to 2C;
 - (iii) in all relevant workshops, publications, correspondence, advertisements and promotions associated with the Grant, openly acknowledge the financial support from the EU in the framework of the ACP-EU-CDB NDRM in CARIFORUM Countries and CDB's contribution to the Project, and display the EU, ACP and CDB's logos; and
 - (iv) submit to CDB, in form and substance acceptable to CDB, the reports set out in Appendix 2A to this Paper within the periods stipulated therein.

- (b) Except as CDB may otherwise agree, UWI shall:
 - (i) meet, or cause to be met:
 - (aa) the cost of the items designated for financing by UWI, in the Budget;
 - (bb) any amount by which the cost of the Grant exceeds the estimated costs set out in the Budget; and
 - (cc) the cost of any other items needed for the purpose of, or in connection with, the Grant; and
 - (ii) provide all other inputs required for the punctual and efficient carrying out of the Grant not being financed by CDB.
- (c) CDB shall be entitled to suspend, cancel or require a refund of the Grant, or any part thereof, if there shall have been a failure by the donors, to provide the whole or any part of their contribution, except that UWI shall not be required to refund any amount of the Grant already expended by UWI in connection with the Grant and not recoverable by it.

SUPPORTING DOCUMENTATION

- Appendix 1A Outline of the Report
- Appendix 1B Interactive Climate SMART Series Workshop Agenda
- Appendix 2A TOR Project Coordinator
- Appendix 2B TOR Data Collection Analysts/Technical Assistants
- Appendix 2C TOR Website Design Consultant
- Appendix 3 Design and Monitoring Framework
- Appendix 4 Project Implementation Schedule
- Appendix 5 Performance Rating System
- Appendix 6 Gender Marker Analysis
- Appendix 7A Letter of Support CCCCC
- Appendix 7B Letter of Support CIMH
- Appendix 8 Budget
- Appendix 9 EU Eligibility Rules
- Appendix 10 Procurement Plan

OUTLINE OF THE REPORT

(a) **Executive Summary**

- (b) **Chapter 1:** Introduction and Methodology Defining context and methods, sources of data collection.
- (c) **Chapter 2:** Review of Relevant Literature and Data Availability A comprehensive review of credible reports and articles on Caribbean climate.
- (d) **Chapter 3:** Climatology Defining the climate of the Caribbean as we know it using key meteorological parameters (temperature, rainfall etc.).
- (e) **Chapter 4:** Observed Climate Variability and Trends Historical variability or long term trends.
- (f) **Chapter 5:** Climate Projections: From SRES to RCP- An expose of how projections are made and the difference countenanced by the new RCP *vis a vis* SRES.
- (g) **Chapter 6:** Recent Extreme Climates A description of recent climatic events of note and their impact in the region including reported historical impacts from Caribbean climate impacts database.
- (h) **Chapter 7:** Sector Tables A compilation of potential impacts of climate change for relevant sectors in the Caribbean with references.
- (i) **Chapter 8:** The Value of Climate Information: A chapter on climate services including existing initiatives.
- (j) **Chapter 9:** Conclusions and Recommendations.

| DAY 1 - Climate | e Change Matters – The Who, Wha | at, Why, Where and When in One Day! |
|-----------------|--|---|
| 9:00 - 9:30 | Welcome and Introductions | • Greetings, Introductions |
| | | • Outline of Day Ahead |
| 9:30 - 10:00 | Exercise 1 | Climate Profile |
| 10:00 – 10:45 | Talk 1 – The Basics Introduction to Climate Change | What is Climate Change? Climate vs Climate Variability vs Climate Change. Why Climate Change? Historical Evidence of Climate Change from the IPCC (Global focus). Historical Evidence of Climate Change – Caribbean |
| 10:45 -11:05 | BREAK | |
| 11:05 – 11:45 | Talk 2 – More Fundamentals Future climates – how and what we know? | Overview of: Global Climate Models (GCMs) GCMs versus RCMs SRES versus RCPs – Meaning and Relevance. Projections, Climate Scenario, Climate Change Scenario |
| 11:45 - 12:30 | Exercise 2 | Interactive learning Exercise |
| 12:30 - 1:30 | LUNCH | |
| 1:30 - 1:45 | Queries, Concerns, Questions, Recap | |
| 1:45 - 2:15 | Talk 3 – Climate and USVI Climate Change and USVI –Real Or Imagined? | What Do We know About Climate Change In USVI? How Has It changed? Observe. How will USVI Climate, Change? Projections Examples |
| 2:15 - 3:20 | Exercise 3 | Interactive Learning Exercise: Our Future, What Does It Look Like? Create Specific Mid-term Climate Scenarios for USVI Focusing on Temperature And Rainfall - Interactive Discussion |
| 3:20 - 3:40 | BREAK | |
| 3:40 - 4:00 | Wrap up, Sneak Peak and Homework | What's Available for Caribbean – Data Sources Sources of Climate Change information |
| PUBLIC LECTU | RE: Climate Matters | - |

AGENDA: CLIMATE SMART SERIES WORKSHOP

| DAY 2 - Climat | e Change Matters – Reducing Ou | r Risk, Lessening Our Vulnerability |
|----------------|---|--|
| 9:00 - 9:15 | Preliminaries | Greetings, IntroductionsQuick Review of Day One |
| 9:15 - 9:45 | Talk 4 – Not just Science but Impacts | Overview of Climate Change Impacts |
| 9:45 - 10:00 | | • Overview and Outline for Day's Activities The 3 Step Challenge |
| 10:00 - 10:40 | Step 1: Make the Link! Interactive Exercise Part 1 | Assessing Vulnerability, Identifying Impacts Identifying Climate Change and Sector Linkages |
| 10:40 - 11:00 | BREAK | |
| 11:00 - 11:20 | Interactive Exercise Part 1 Cont'd | Identifying Climate Change Impacts Associated with Various Strategies Additional Tools for Assessing Vulnerability |
| 11:20 - 12:30 | Step 2: Make a Plan! Interactive Exercise Part 2 | Identification of Adaptation Strategies Step 2: Additional Tools for Identifying and Developing Adaptation Strategies |
| 12:30 - 1:30 | LUNCH | |
| 1:30 - 2:30 | Step 3: Make a Choice! Interactive Exercise Part 3 | Prioritise Options Bearing in Mind Constraints and Objectives |
| 2:30 - 3:30 | Presentation of Exercise | Additional Decision-Making Tools Presentation and Discussion |
| 2.30 - 3.30 | Results | • Challenges to Implementation and What To Do With Information Learned |
| | | Obstacles To Factoring in Climate Change in Daily Work Activities |
| | | Identification of Resources- Possible Partners, Networks, Educational Resources, Financial Resources (Donors etc.), Existing Projects? |
| 3:30 - 4:00 | BREAK | |
| 4:00 - 4:30 | Closure | Recap and What Next?Evaluation Exercise |

APPENDIX IB Page 3

| DAY 3 - Develo | opment Of Multi-Sectoral Road Map Fo | r Action |
|----------------|--------------------------------------|---|
| 9:00 - 9:15 | Preliminaries | Greetings |
| 9:15 - 10:45 | Group Activity | Developing Adaptation Strategies For Climate Sensitive Sectors |
| 10:45 - 11:00 | BREAK | |
| 11:00 - 12:30 | Group Activity | Developing Adaptation Strategies For Climate Sensitive Sectors |
| 12:30 - 1:30 | LUNCH | · · · |
| 1:30 - 3:15 | Presentation of Exercise Results | Presentation and Discussion Road Map For Action |
| 3:15 - 3:30 | BREAK | |
| 3:30 - 4:00 | Closure | Concluding Remarks |

PREPARATION OF THE STATE OF THE CARIBBEAN CLIMATE REPORT, 2016: INFORMATION FOR RESILIENCE BUILDING

DRAFT TERMS OF REFERENCE PROJECT COORDINATOR

1. <u>BACKGROUND</u>

1.01 The African Caribbean Pacific–European Union–Caribbean Development Bank Natural Disaster Risk Management (ACP-EU-CDB NDRM) programme is a part of the Caribbean component of the 10th European Development Fund Intra-ACP Cooperation Strategy (2008-2013) in which the ACP Group and the EU recognised the need to increase efforts with regard to *ex ante* Disaster Risk Reduction (DRR) and Climate Change Adaptation (CCA). The ACP-EU-CDB NDRM programme aims at reducing the vulnerability to long-term impacts of natural hazards, including the potential impacts of Climate Change (CC), thereby achieving regional and national sustainable development and poverty reduction goals in the CARIFORUM Countries. The programme is comprised of four Result Areas (RA) being managed by three implementing partners, the Caribbean Disaster Emergency Management Agency (CDEMA) (RA 1); CDB (RA 2 and 3); and the Ministry of the Presidency of the Dominican Republic (RA 4). CDB components focus on strengthening regional, national and community level capacities for mitigation, preparedness, management and coordinated response to natural hazards and the effects of climate change. The four RA are:

- (a) **RA 1** Capacity of National Disaster Management Offices and CDEMA Coordinating Unit strengthened for implementation of Comprehensive Disaster Management.
- (b) **RA 2** National, local and regional resilience enhanced through strengthened early warning, national risk profiling and community-based DRR.
- (c) **RA 3** Sector Resilience Strengthened in Key Public Sectors, through DRR and CCA Mainstreaming.
- (d) **RA 4** Capacity building and the establishment of common policies, strategies, programmes and sub-programmes undertaken as a contribution.

1.02 The Intergovernmental Panel on Climate Change (IPCC) has reported scientific evidence of global warming resulting from human activities that contribute to increasing concentrations of greenhouse gases in the atmosphere. An unprecedented rate of warming of the climate system has been observed since 1950 in comparison with previous decades and millennia¹. In the Northern Hemisphere, the period 1983 to 2012 was the warmest 30-year period of the last 1,400 years. Although the Small Island Developing States (SIDS) including those in the Caribbean contribute minimally (less than one percent) to global emissions, they are among the most vulnerable countries to the impacts of climate variability and climate change (CVC). Their vulnerability is due to high exposure of the population and infrastructure to multiple hazards, population poverty and inequality, and accelerated urbanisation and environmental degradation.

1.03 Hydro-meteorological and hydro-climatic events represent the most frequently occurring hazards in the Caribbean and collectively produce some of the most significant negative socio-economic impacts in the region. CC is predicted to increase both the frequency and intensity of these events. Severe weather

¹ IPCC, 2014. The IPCC's Fifth Assessment Report, What's in it for SIDS?

APPENDIX 2A Page 2

during the annual North Atlantic Hurricane Season over the last two decades has produced significant impact in Borrowing Member Countries (BMCs), resulting in economic and social dislocation, loss of life, property and livelihoods. For the period 1990-2016, disasters resulting from natural hazards were estimated at USD8.6 billion² (bn) in Haiti, USD2.7 bn in Bahamas, USD1.6 bn in Jamaica and USD0.6 bn in Belize³. The IPCC predicts that by mid-century, the impacts of CC on many small Caribbean islands will lead to decreased water resource availability and there will be insufficient water to meet demand during low-rainfall periods. Under an intermediate low-emissions scenario, projections are for the Caribbean region to have an average annual increase in surface temperature of 1.2–2.3°C, a decrease in rainfall of about 5–6% and a sea level rise of 0.5–0.6 meters by the end of the century. Sea level rise could also exacerbate coastal flooding, thus negatively affecting critical infrastructure and resources supporting livelihoods⁴.

1.04 In response to global warming concerns and the vulnerability and potential impacts of CC on the SIDS, the Alliance of Small Island States and the Caribbean Community (CARICOM) at the 21st session of the Conference of the Parties to the United Nations Framework Convention on Climate Change in 2015, advocated "to hold the increase in global average temperature to below 1.5°C above pre-industrial levels" as the long-term temperature goal. The ensuing Paris Agreement includes language which takes account of the 1.5 °C above pre-industrial levels option. Ratification of the Paris Agreement obligates the Parties to prepare and communicate their Nationally Determined Contributions (NDCs), outlining national climate plans for greenhouse gas emission reduction, including mitigation and adaptation actions towards the achievement of the Agreement. A review of the indicative NDCs of BMCs show a focus on policy and programmes that will support climate resilience action in climate sensitive sectors: energy, agriculture, tourism, water, forestry and transportation.

1.05 In its Fifth Assessment Report, the IPCC underscores the data limitations faced by many SIDS and the constraints it places on their abilities to design and develop appropriate and effective policies and programmes for their climate agenda. The report underscores the fact that it is "incredibly difficult to downscale climate scenarios and projections from global CC models to the resolution required to inform decision-making. For many SIDS and in some BMCs this is further compounded by a lack of observational climate data, which is a necessary input for climate modelling and scenario planning. The on-going work of the Climate Studies Group Mona in collaboration with other regional partners such as Caribbean Institute for Meteorology and Hydrology and Caribbean Community Climate Change Centre is focused on this very issue of improving data availability at appropriate spatio-temporal scale for use by BMCs. The State of the Caribbean Climate Report is intended to be a comprehensive 'first-stop' reference report that provides a state of the knowledge account of CVC on which actionable recommendations to improve the region's resilience at all levels and for all sectors can be premise. The present technical assistance is directed at developing this reference State of the Caribbean Climate Report.

2. <u>OBJECTIVES</u>

2.01 The primary responsibility of the Project Coordinator (PC) is to coordinate the preparation, production and dissemination of the "State of the Caribbean Climate Report 2016: Information for Resilience Building".

² Damages as a result of the devastating earthquake on January 12, 2010 in Haiti were estimated at USD8.0 bn.

³ http://www.emdat.be/database

⁴ IPCC, 2007: Climate Change 2007: Synthesis Report. Contribution of Working Groups I, II and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, Pachauri, R.K and Reisinger, A. (eds.)]. IPCC, Geneva, Switzerland, 104 pp.

3. <u>SCOPE OF WORK</u>

3.01 The PC will be directly responsible for coordinating the execution of all Project activities and ensuring Project technical supervision and quality of deliverables.

- 3.02 Specific duties and responsibilities of the PC will include, but not be limited to:
 - (a) coordinating climate data gathering and analysis, and reporting;
 - (b) managing the selection and engagement of consultants and contractors, and the procurement of materials, goods and services;
 - (c) facilitating University of the West Indies (UWI) and key external stakeholder consultations;
 - (d) coordinating validation workshops in Jamaica and St. Lucia and launch of the report in Barbados;
 - (e) ensuring timely and quality deliverables;
 - (f) liaising with Mona Office for Research and Innovation and the Special Project Unit at UWI on all administrative and financial aspects of the Project;
 - (g) liaising with CDB Project Management Unit on all technical, administrative and financial aspects of the Project;
 - (h) preparing and submitting progress reports to CDB; and
 - (i) executing any other tasks as assigned by UWI to facilitate the successful completion of the report.

4. **QUALIFICATIONS AND EXPERIENCE**

4.01 The Consultant must have recognised credentials (PhD degree) in Climate Science, Meteorology, Climatology, Coastal and Marine Science or related field, and proven experience (at least seven years) in:

- (a) climate modelling;
- (b) environmental modelling; and
- (c) statistical analysis.
- 4.02 The Consultant shall also possess:
 - (a) excellent research, analytical, organisational and communication skills;
 - (b) specific experience in the Caribbean region; and
 - (c) good understanding of the environmental challenges in SIDS.

5. <u>REPORTING REQUIREMENTS AND DELIVERABLES</u>

- 5.01 The PC will be required to provide the following reports and deliverables to CDB:
 - (a) Inception Report within two weeks of the signing of the Grant Agreement and a revised implementation schedule, including a detailed plan for data gathering and data analysis, and validation workshops ;
 - (b) Progress Report 1- within three months after commencement of the Project;
 - (c) Progress Report 2 which includes the first draft of the "State of the Caribbean Climate Report" within three months following the submission of Progress Report 1;
 - (d) Progress Report 3 which includes the feedback from the validation workshops and a revised second draft of the "State of the Caribbean Climate Report" including a non-technical summary within three months following the submission of Progress Report 2;
 - (e) Progress Report 4 which includes a final "State of the Caribbean Climate Report" including a non-technical summary within three months following the submission Progress Report 3;
 - (f) Progress Report 5 within three months following the submission of Progress Report 4; and
 - (g) Final Project Report within three months following the submission of Progress Report 5.

6. <u>DURATION</u>

6.01 The duration of this assignment is 17 months.

PREPARATION OF THE STATE OF THE CARIBBEAN CLIMATE REPORT, 2016: INFORMATION FOR RESILIENCE BUILDING

DRAFT TERMS OF REFERENCE DATA COLLECTION ANALYSTS/ TECHNICAL ASSISTANTS

1. <u>BACKGROUND</u>

1.01 The Intergovernmental Panel on Climate Change (IPCC) has reported scientific evidence of global warming resulting from human activities that contribute to increasing concentrations of greenhouse gases in the atmosphere. An unprecedented rate of warming of the climate system has been observed since 1950 in comparison with previous decades and millennia¹. In the Northern Hemisphere, the period 1983 to 2012 was the warmest 30-year period of the last 1,400 years. Although the Small Island Developing States (SIDS) including those in the Caribbean contribute minimally (less than one percent) to global emissions, they are among the most vulnerable countries to the impacts of climate variability and climate change (CVC). Their vulnerability is due to high exposure of the population and infrastructure to multiple hazards, population poverty and inequality, and accelerated urbanisation and environmental degradation.

1.02 Hydro-meteorological and hydro-climatic events represent the most frequently occurring hazards in the Caribbean and collectively produce some of the most significant negative socio-economic impacts in the region. Climate change (CC) is predicted to increase both the frequency and intensity of these events. Severe weather during the annual North Atlantic Hurricane Season over the last two decades has produced significant impact in Borrowing Member Countries (BMCs), resulting in economic and social dislocation, loss of life, property and livelihoods. For the period of 1990-2016, disasters resulting from natural hazards were estimated at USD8.6 billion² (bn) in Haiti, USD2.7 bn in Bahamas, USD1.6 bn in Jamaica and USD0.6 bn in Belize³. The IPCC predicts that by mid-century, the impacts of CC on many small Caribbean islands will lead to decreased water resource availability and there will be insufficient water to meet demand during low-rainfall periods. Under an intermediate low-emissions scenario, projections are for the Caribbean region to have an average annual increase in surface temperature of $1.2-2.3^{\circ}$ C, a decrease in rainfall of about 5–6 % and a sea level rise of 0.5–0.6 meters by the end of the century. Sea level rise could also exacerbate coastal flooding, thus negatively affecting critical infrastructure and resources supporting livelihoods⁴.

1.03 In response to global warming concerns and the vulnerability and potential impacts of CC on the SIDS, the Alliance of Small Island States and the Caribbean Community (CARICOM) at the 21st session of the Conference of the Parties to the United Nations Framework Convention on Climate Change in 2015, advocated "to hold the increase in global average temperature to below 1.5°C above pre-industrial levels" as the long-term temperature goal. The ensuing Paris Agreement includes language which takes account of the 1.5 °C above pre-industrial levels option. Ratification of the Paris Agreement obligates the Parties to prepare and communicate their Nationally Determined Contributions (NDCs), outlining national climate plans for greenhouse gas emission reduction, including mitigation and adaptation actions towards the achievement of the Agreement. A review of the indicative NDCs of BMCs show a focus on policy and

¹ IPCC, 2014. The IPCC's Fifth Assessment Report, What's in it for SIDS?

² Damages as a result of the devastating earthquake on January 12, 2010 in Haiti were estimated at USD8.0 bn.

³ http://www.emdat.be/database

⁴ IPCC, 2007: Climate Change 2007: Synthesis Report. Contribution of Working Groups I, II and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, Pachauri, R.K and Reisinger, A. (eds.)]. IPCC, Geneva, Switzerland, 104 pp.

programmes that will support climate resilience action in climate sensitive sectors: energy, agriculture, tourism, water, forestry and transportation.

1.04 In its most recent Fifth Assessment Report, the IPCC underscores the data limitations faced by many SIDS and the constraints it places on their abilities to design and develop appropriate and effective policies and programmes for their climate agenda. The report underscores the fact that it is "incredibly difficult to downscale climate scenarios and projections from global CC models to the resolution required to inform decision-making. For many SIDS and in some BMCs this is further compounded by a lack of observational climate data, which is a necessary input for climate modelling and scenario planning. The on-going work of the Climate Studies Group Mona in collaboration with other regional partners such as Caribbean Institute for Meteorology and Hydrology and Caribbean Community Climate Change Centre is focused on this very issue of improving data availability at appropriate spatio-temporal scale for use by BMCs. The State of the Caribbean Climate Report is intended to be a comprehensive 'first-stop' reference report that provides a state of the knowledge account of CVC on which actionable recommendations to improve the region's resilience at all levels and for all sectors can be premise. The present technical assistance is directed at developing this reference State of the Caribbean Climate Report.

2. <u>OBJECTIVES</u>

2.01 The primary responsibility of the Technical Assistants will be to collect, analyse and report climate data for the preparation of the "State of the Caribbean Climate Report 2016: Information for Resilience Building".

3. <u>SCOPE OF WORK</u>

- 3.01 Specific duties and responsibilities include:
 - (a) conduct literature review of credible databases, reports and articles on Caribbean climate;
 - (b) data collection and compilation of Caribbean climate data;
 - (c) basic and advanced (Empirical Orthogonal Functions, Singular Value Decomposition, Global Climate Model, Regional Climate Model analyse) data analyses; and
 - (d) preparation of draft sections of the Report.

4. **QUALIFICATIONS AND EXPERIENCE**

4.01 The Technical Assistants are required to have recognised credentials in Climate Science, Meteorology, Climatology, Environmental Science or related disciplines. In addition, they must have:

- (a) working experience in climate and environmental modelling;
- (b) working experience in climate data analysis;
- (c) working experience in statistical analysis; and
- (d) good oral and written communication skills.

5. <u>DELIVERABLES</u>

- 5.01 The Consultant will provide sections of the technical report including *inter-alia* the:
 - (a) analytical summary of the climate data; and
 - (b) references of the climate data.

6. <u>DURATION</u>

6.01 The assignment will require a level of effort of five months.

PREPARATION OF THE STATE OF THE CARIBBEAN CLIMATE REPORT, 2016: INFORMATION FOR RESILIENCE BUILDING

DRAFT TERMS OF REFERENCE WEBPAGE DESIGN CONSULTANT

1. <u>BACKGROUND</u>

1.01 The Intergovernmental Panel on Climate Change (IPCC) has reported scientific evidence of global warming resulting from human activities that contribute to increasing concentrations of greenhouse gases in the atmosphere. An unprecedented rate of warming of the climate system has been observed since 1950 in comparison with previous decades and millennia¹. In the Northern Hemisphere, the period 1983 to 2012 was the warmest 30-year period of the last 1,400 years. Although the Small Island Developing States (SIDS) including those in the Caribbean contribute minimally (less than one percent) to global emissions, they are among the most vulnerable countries to the impacts of climate variability and climate change (CVC). Their vulnerability is due to high exposure of the population and infrastructure to multiple hazards, population poverty and inequality, and accelerated urbanisation and environmental degradation.

1.02 Hydro-meteorological and hydro-climatic events represent the most frequently occurring hazards in the Caribbean and collectively produce some of the most significant negative socio-economic impacts in the region. Climate change (CC) is predicted to increase both the frequency and intensity of these events. Severe weather during the annual North Atlantic Hurricane Season over the last two decades has produced significant impact in Borrowing Member Countries (BMCs), resulting in economic and social dislocation, loss of life, property and livelihoods. For the period of 1990-2016, disasters resulting from natural hazards were estimated at USD8.6 billion² (bn) in Haiti, USD2.7 bn in Bahamas, USD1.6 bn in Jamaica and USD0.6 bn in Belize³. The IPCC predicts that by mid-century, the impacts of CC on many small Caribbean islands will lead to decreased water resource availability and there will be insufficient water to meet demand during low-rainfall periods. Under an intermediate low-emissions scenario, projections are for the Caribbean region to have an average annual increase in surface temperature of 1.2–2.3°C, a decrease in rainfall of about 5–6 % and a sea level rise of 0.5–0.6 meters by the end of the century. Sea level rise could also exacerbate coastal flooding, thus negatively affecting critical infrastructure and resources supporting livelihoods⁴.

1.03 In response to global warming concerns and the vulnerability and potential impacts of CC on the SIDS, the Alliance of Small Island States and the Caribbean Community (CARICOM) at the 21st session of the Conference of the Parties to the United Nations Framework Convention on Climate Change in 2015, advocated "to hold the increase in global average to below 1.5°C above pre-industrial levels" as the long-term temperature goal. The ensuing Paris Agreement includes language which takes account of the 1.5°C above pre-industrial levels option. Ratification of the Paris Agreement obligates the Parties to prepare and communicate their Nationally Determined Contributions (NDCs), outlining national climate plans for greenhouse gas emission reduction, including mitigation and adaptation actions towards the achievement of the Agreement. A review of the indicative NDCs of BMCs show a focus on policy and programmes that will support climate resilience action in climate sensitive sectors: energy, agriculture, tourism, water, forestry and transportation.

¹ IPCC, 2014. The IPCC's Fifth Assessment Report, What's in it for SIDS?

² Damages as a result of the devastating earthquake on January 12, 2010 in Haiti were estimated at USD8.0 bn.

³ http://www.emdat.be/database.

⁴ IPCC, 2007: Climate Change 2007: Synthesis Report. Contribution of Working Groups I, II and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, Pachauri, R.K and Reisinger, A. (eds.)]. IPCC, Geneva, Switzerland, 104 pp.

1.04 In order to build the resilience of the countries to CVC, it is imperative for the region to have easily accessible, updated and credible reports at the appropriate spatio-temporal scale of the Caribbean, to inform adaptation actions, mitigation strategies, and importantly to ensure that policy directives, mainstream CC considerations into all aspects of sectoral planning. Such information is still lacking in the Caribbean region as the current information is not wholly suitable for the intended purposes. The State of the Caribbean Climate Report is intended to be a comprehensive 'first-stop' reference report that provides a state of the knowledge account of CVC on which actionable recommendations to improve the region's resilience at all levels and for all sectors can be premised.

2. <u>OBJECTIVES</u>

2.01 The primary objective of the proposed consultancy services is to design and launch a webpage to host relevant regional climate data and the "State of Caribbean Climate Report, 2016: Information for Resilience Building".

3. <u>SCOPE OF WORK</u>

- 3.01 Specific duties and responsibilities include:
 - (a) configure web server and install operating system;
 - (b) design and configure Dupral;
 - (c) design a user-friendly website to host and share Caribbean climate data;
 - (d) implement website design and content; and
 - (e) conduct Dupral training to Climate Studies Group Mona (CSGM) for content and maintenance.

4. **QUALIFICATIONS AND EXPERIENCE**

4.01 The Consultant is required to have recognised credentials in Computer Science, Information Technology, or related disciplines. In addition, the Consultant must have:

- (a) proven work experience as a web designer;
- (b) superior user interface design skills; and
- (c) good creative thinking skills.

5. <u>DELIVERABLES</u>

- 5.01 The Consultant will:
 - (a) deliver a user-friendly webpage by the end of July 2017 to host and share the "State of Caribbean Climate Report, 2016" and other relevant national and regional climate data; and
 - (b) conduct training of CSGM staff in Dupral in August 2017.

6. <u>DURATION</u>

6.01 The website development and training for content and maintenance to CSGM staff will require a level of effort of 21.5 days over a period of 2 months.

DESIGN AND MONITORING FRAMEWORK

| Design Summary | Key Performance Targets/ Indicators | Data Sources/ Means of Verification | Assumptions |
|--|---|---|--|
| Impact Increased evidenced-based climate actions by BMCs. | Eight entities in BMCs use the report for DRR and CCA strategic plans and work programmes development by August 2019. | National and regional DRR and CCA strategic plans and work programmes referencing the report. | |
| Outcome Increased awareness about and use of updated and reliable climate data in BMCs. | Eight Sector Plans use climate data from the report by January 2019; Three hundred individuals view the workshop video (disaggregated by sex) by January 2019; and Three hundred individuals from BMCs download the report (disaggregated by sex) by October 2018. | Policy, sector investments and other documents referencing the report. Website register. | Policy-makers see the need for and use of climate data in the decision- making process. Representation and active participation of climate sensitive sector representatives in the workshops. Workshop content properly delivered to participants. |
| Outputs (a) Comprehensive technical report about the State of the Caribbean Climate including a non-technical summary completed and validated. | Final version of "State of the Caribbean Climate Report" 'including a non-technical summary by April 2018.One hundred hard copies and 100 soft copies of technical report and summary document disseminated to decisions makers and technical persons in key climate sensitive sectors within BMCs and relevant regional institutions by May 2018. | Project progress reports. CDB Supervision Reports. Feedback from key stakeholders involved in data gathering, consultation and the validation workshop. | denvered to participants. |
| (b) Operational Webpage on updated Caribbean climate information finalised. | Webpage developed and launched by November 2017. | Workshop attendance register. Launch attendance register. | |
| (c) Validation workshops completed. | Ninety-two persons attended the validation workshops (disaggregated by sex) by October 2017. | | |
| (d) Interactive "Climate SMART Series" workshops completed. | One hundred and eight representatives of climate sensitive sectors in BMCs attended the interactive workshops (disaggregated by sex) by September 2018. Workshop video distributed via the webpage by October 2018. | Project progress reports. CDB supervision Reports. Workshop attendance register. | |
| (e) Multi-sectoral CCA road map for action developed. | CCA road map for action developed by September 2018. | Project progress reports. CDB supervision Reports. Project progress reports. CDB supervision Reports. | |

DESIGN AND MONITORING FRAMEWORK

| | Estimated Cost (EUR) | | | | | | |
|-------|----------------------|------------------------|---------|--|--|--|--|
| | CDB | UWI, CIMH and CCCCC | Total | | | | |
| Total | 445,056 | 123,283 | 568,339 | | | | |

PROJECT IMPLEMENTATION SCHEDULE

| ID Task Name | | | 201 | 16 | O N D | Half 1, 2017 J F M | Half 2 | 2,2017 | Half 1, 2018 N D J F | | Half 2, 2018 J A S O N |
|--|---------------------------------|-------------------------|-----|-------|--------------------|-----------------------|--------------------------|--------|-------------------------|---------|---------------------------|
| | the second second | data and data in | A | A 8 | O N D | J F M | A M J J | A 8 0 | N D J F | M A M J | JASON |
| | ction of Technical Report an | d Non-Technical Summary | | | | | • | | | • | |
| 2 Desk Review | | | | | | | | | | | |
| 3 Preparation Inception Rep | | | | | | | 5/15 | | | | |
| Inception Report Submitt Stakeholder Consultation: | | | | | | | 5/15 | | | | |
| | 5 | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | • 7/31 | | | |
| 8 Progress Report 1 Submitt 9 Preparation of 1st Draft of | | | | | | | • | • 101 | _ | | |
| | | | | | | | | | | | |
| | | | | | | | - | | | | |
| 11 Design, Develop and La | sunch Webpage | | | | | | | | | | |
| 12 Webpage finalised 13 Validation Workshop 1 in | | | | | | | | • | 10/31 | | |
| | | | | | | | | | | | |
| 14 Validatation Workshop 2 | | | | | | | | | | | |
| 15 Preparation Progress Report 16 Progress Report 2 Submit | | | | | | | | | 10/31 | | |
| | | | | | | | | • | | | |
| 17 Update Draft of Technical 18 Preparation of Progress Rev | | | | | | | | | | | |
| 18 Proparation of Progress Ki 19 Progress Report 3 Subm | | | | | | | | | ▲ 1/31 | | |
| 20 Finalisation Technical Ren | ort and Summary Document | | | | | | | | ↓ 1/31 | | |
| 20 Finalisation Technical Rep 21 Presentation of Report and | | | | | | | | | | ♦ 4/9 | |
| 22 Progress Report 4 Submit | | | | | | | | | | 4/30 | |
| 23 Interactive Climate Sma | | | | | | | | | | - | |
| 24 Preparation Workshop in | | | | | | | | | | | • |
| | amas and Capture Workshop Vide | | | | | | | | | | |
| 26 Preparation Workshop in | | | | | | | | | | | |
| | igua and Capture Workshop Video | | | | | | | | | | |
| 28 Preparation Workshop in | | , | | | | | | | | | |
| | vana and Capture Workshop Video | | | | | | | | | | |
| 30 Preparation of Progress R | | | | | | | | | | | |
| 31 Progress Report 5 Submittee | | | | | | | | | | | 7/31 |
| | eparation and Submission | | | | | | | | | | v —v |
| 33 Preparation of Final Proje | • | | | | | | | | | | |
| 34 Final Project Report Subn | | | | | | | | | | | 10/15 |
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| | Task 🔶 | Project Summary | 0 | Man | ual Task | | Start-only | E | Deadline | + | |
| Project: WIP_CSGM | Split | Inactive Task | | Dura | tion-only | | Finish-only | 3 | Progress | | |
| Date: Thu 2/2/17 | Milestone + | Inactive Milestone | 0 | | ual Summary Rollup | | External Tasks | - | Manual Progress | | |
| | | | ~ | | | | | | Manual Progress | | |
| | Summary | Inactive Summary | 0 | I Man | ual Summary | | External Milestone | \$ | | | |
| | | | | | Page 1 | | | | | | |

APPENDIX 5

PERFORMANCE RATING SYSTEM

| Criteria | Score | Justification |
|------------------|-------|---|
| Relevance | 4 | The proposed TA is consistent with the ACP-EU-CDB Result Areas 2: Improved local, national and regional resilience through strengthened early warning, national risk profiling and community-based DRR and CCA. This TA is also consistent with CDB Strategic Objectives for (i) Supporting environmental sustainability and DRR, and (ii) Promoting good governance, regional cooperation and integration; and CDB Corporate Priorities for (i) Promoting disaster risk management and climate change mitigation and adaptation, and (ii) Improved protection and sustainable management of natural resources. |
| Effectiveness | 3 | This report will be broadly disseminated to key stakeholders and decision- makers within the BMCs. The interactive "Climate Smart Series" workshop will increase knowledge and awareness of technical persons and decision- makers in BMCs about CC science and its impacts to facilitate informed adaption actions in climate sensitive sectors. It is expected that they will use the information for taking decisions related to DRR and CCA, and hence contributing to the achievements of the ACP-EU-CDB Result Areas 2. |
| Efficiency | 3 | Producing a comprehensive climate report accounting for all the BMCs and its wide dissemination through a webpage is one of the most adequate options for making reliable and updated climate data accessible to the targeted sectors. Similarly, Regrouping representatives of key climate sensitive sectors from the BMCs to three interactive workshops is adequate to increase CVC knowledge and awareness and promote evidenced-based climate actions in the region. The expected cost of this Project is considered reasonable, and the activities and deliverables are expected to be achieved within time and budget. |
| Sustainability | 3 | The Report and the interactive Climate Smart Series Workshop material will be made available in electronic copy and accessible through the web page to be hosted at the UWI website. Key partners within the BMCs can also add a clickable link to the web page in their websites. These tools will allow policy makers and development partners to readily access reliable Caribbean climate data anytime and take informed decisions. UWI/CSGM will ensure that data is periodically updated and will also maintain an online forum to facilitate Group discussions on specific topics regularly. |
| Overall Score | 3.25 | Satisfactory |

APPENDIX 6

GENDER MARKER ANALYSIS

| Project Stage | Criteria | Score |
|--|--|--------|
| Analysis: Introduction/ | Consultations with women/girls/men/boys and relevant gender-related or sector-related public or private organisations have taken place. | 0 |
| Background/ Preparation | Social analysis identifies gender issues and priorities. | 0 |
| | Macroeconomic analysis identifies gender issues and priorities. | 0 |
| Design: Project Proposal/ Definition/ Objective/ Description | To address the needs of women/girls and men/boys concrete interventions to reduce existing gender disparities have been designed. Effect on project outcome is direct. | 0 |
| F | Project objective/outcome includes gender equality. | 0 |
| Implementation: Execution | Implementation arrangements (gender mainstreaming capacity building or gender expertise in implementing agency) to enhance the gender capacity of the implementing agency. Effect on project outcome is indirect. Terms of Reference of Project Coordinating Unit/Project Management | 0 0 |
| | Unit include responsibilities of gender mainstreaming, especially at the levels of the Project Coordinator/Director and the Monitoring and Evaluation (M&E) Officer. | |
| Monitoring and Evaluation: Results- Monitoring- Framework | Collection of sex-disaggregated data required for M&E (stated and budgeted in Project). | 0.5 |
| (RMF) | At least one gender-specific indicator at the outcome and/or output level in the RMF. | 0 |
| Overall Score | | 0.5 |
| Marginally mainstream | 3.75 points to 4 points GM): if 3 points to 3.5 points ed (MM): if 1.5 to 2.75 points. o or 1; if NO please give a justification why | |

LETTER OF SUPPORT CARIBBEAN COMMUNITY CLIMATE CHANGE CENTRE



The Caribbean Development Bank, Wildey, St Michael, Barbados. 05.12.16

Dear Sir,

<u>Letter of Support</u> <u>Re: Preparation of the State of the Caribbean Report,2016:</u> <u>Information for Resilience Building</u>

The Caribbean Community Climate Change Centre(CCCCC) pledges its support to the Climate Studies Group Mona (CSGM), University of the West Indies, regarding the above captioned activity under the African Pacific-European Union-Caribbean Development Bank Natural Disaster Risk Management (ACP-EU-CDB-NDRM) programme. The CCCCC attaches great importance to this activity as it will make a significant contribution to informing regional action to chart a low carbon and climate resilient development pathway as articulated in the Regional Framework Strategy and its accompanying Implementation Plan which were approved by regional Heads of Government. It will also provide the region with a more robust platform for fact based decision making for climate change mitigation and adaptation.

The Centre looks forward to providing whatever support we can offer to the CSGM to ensure the successful implementation of this activity.

Sincerely Yours,

hhic o ...) The

Dr Ulric Trotz, Science Adviser and Deputy Director, Caribbean Community Climate Change Centre.

<u>LETTER OF SUPPORT</u> CARIBBEAN INSTITUTE FOR METEOROLOGY AND HYDROLOGY

CARIBBEAN INSTITUTE FOR METEOROLOGY AND HYDROLOGY Husbands, St. James BB 23006, Barbados

Web: http://www.cimh.edu.bb

Tel: 246-425-1362 246-425-1363 246-425-1365

Fax: 246-424-4733

In Reply Please Refer To: PR/CDB-20/9943

P.O. Box 130 Bridgetown Barbados

11 October, 2016

The Caribbéan Development Bank Wildey ST. MICHAEL

Dear Sir

Letter of Support Re: Preparation of the State of the Caribbean Climate Report, 2016: Information for Resilience Building

The Caribbean Institute for Meteorology and Hydrology (CIMH) pledges its support to the Climate Studies Group Mona, University of the West Indies, regarding the above-captioned activity under the African Caribbean Pacific - European Union - Caribbean Development Bank Natural Disaster Risk Management (ACP-EU-CDB NDRM) Programme. The CIMH sees this as a very important activity towards supporting climate resilience in the Caribbean, as it provides documented evidence of the Caribbean's climate in 2016, which as it is turning out, will be an extreme year - from drought to floods, extreme high temperatures and strong winds as from Hurricane Matthew.

The CIMH looks forward to being a part of this important activity.

Yours faithfully

David A. Farrell, PhD., P.G. (Texas) Principal

DAF/sm

PREPARATION AND PRODUCTION OF TECHNICAL REPORT AND NON-TECHNICAL SUMMARY

BUDGET (EUR)

| | Contribution | | | | | | | |
|--------------------|--------------|------------------------|---------|--|--|--|--|--|
| | CDB | UWI, CIMH and CCCCC | Total | | | | | |
| Total Project Cost | 445,056 | 123,283 | 568,339 | | | | | |

EUROPEAN UNION ELIGIBILITY RULES AFRICAN CARIBBEAN PACIFIC – EUROPEAN UNION NATURAL DISASTER RISK MANAGEMENT

PARTICIPATION IN PROCEDURES FOR THE AWARDING OF PROCUREMENT CONTRACTS OR GRANT CONTRACTS

1. Participation in procedures for the award of procurement contracts financed under the EU Contribution Agreement for the Implementation for the Action entitled: "Africa Caribbean Pacific – European – Caribbean Development Bank (ACP-EU-CDB) Natural Disaster Risk Management in CARIFORUM Countries" (ACP – EU NDRM Resources)", is open to international organisations and all natural persons who are nationals of, or legal persons who are established in, an eligible country.

- 2. Eligible countries are deemed to be:
 - (a) Caribbean Development Bank member countries:

Anguilla, Antigua and Barbuda, Barbados, Belize, Brazil, British Virgin Islands, Canada, Cayman Islands, China, Columbia, Dominica, Germany, Grenada, Guyana, Haiti, Jamaica, Italy, Mexico, Montserrat, St Kitts and Nevis, Saint Lucia, St Vincent and the Grenadines, Suriname, The Bahamas, Trinidad and Tobago, Turks and Caicos Islands, the United Kingdom and Venezuela.

(b) Members of the "African, Caribbean and Pacific (ACP) Group of States"²:

Africa:

South Africa^{*}, Angola, Benin, Botswana, Burkina Faso, Burundi, Central African Republic, Cameroon, Cape Verde, Chad, Comoros Islands, Congo, Côte d'Ivoire, Democratic Republic of the Congo, Djibouti, Eritrea, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Equatorial Guinea, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritius, Mauritania, Mozambique, Namibia, Niger, Nigeria, Uganda, Rwanda, Sao Tome and Principe, Senegal, Seychelles, Sierra Leone, Somalia, Sudan, Swaziland, Tanzania, Togo, Zambia and Zimbabwe.

¹ Note some countries may be eligible by virtue of more than one category

Cotonou Partnership Agreement of 23 June 2000 (as amended by the provisional application of Decision No 1/2000 of the ACP-EC Council of Ministers of 27 July 2000, Decision No 1/2000 of the ACP-EC customs cooperation committee of 18 October 2000, Decision No 1/2001 of the ACP-EC customs cooperation committee of 20 April 2001, Decision No 2/2001 of the ACP-EC customs cooperation committee of 20 April 2001, Decision No 3/2001 of the ACP-EC customs cooperation committee of 20 April 2001, Decision No 3/2001 of the ACP-EC customs cooperation committee of 20 April 2001, Decision No 3/2001 of the ACP-EC customs cooperation committee of 27 June 2001, Decision No 5/2001 of the ACP-EC customs cooperation committee of 7 December 2001, Decision No 5/2002 of the ACP-EC customs cooperation committee of 28 October 2002, Decision No 1/2003 of the ACP-EC Council of Ministers of 16 may 2003, Council Decision (EC) of 19 December 2002, Decision No 1/2004 of the ACP-EC Council of Ministers of 6 may 2004, Decision No 2/2004 of the ACP - EC customs cooperation committee of 30 June 2004 and Decision No 4/2005 of the ACP-EC customs cooperation committee of 13 April 2005).

³ Natural and legal South African persons are eligible to participate in contracts financed by the 10th/11th EDF. However, the 10th/11th EDF does not finance contracts in South Africa.

Pacific:

Cook Islands, East Timor, Fiji, Kiribati, Marshall Islands, Micronesia, Nauru, Niue, Palau, Papua New Guinea, the Solomon Islands, Western Samoa, Tonga, Tuvalu, Vanuatu.

Overseas Countries and Territories:

Anguilla, Antarctic, Netherlands Antilles, Aruba, British Indian Ocean Territory, British Virgin Islands, Cayman Islands, Falkland Islands (Malvinas), French Polynesia, French Southern Territories, Greenland, Mayotte, Montserrat, New Caledonia, Pitcairn, Saint Helena, Saint Pierre and Miquelon, South Georgia and South Sandwich Islands, Turks and Caicos, Wallis and Futuna Islands.

(c) A Member State of the European Union:

Austria, Belgium, Bulgaria, Croatia, Czech republic, Cyprus, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, United Kingdom.

An official candidate country of the European Union:

The Former Yugoslav Republic of Macedonia, Turkey, Iceland, Montenegro.

A Member State of the European Economic Area: Iceland, Lichtenstein, Norway.

(d) All natural persons who are nationals of, or legal persons who are established in, a Least Developed Country as defined by the United Nations:

Afghanistan, Angola, Bangladesh, Benin, Bhutan, Burkina Faso, Burundi, Cambodia, Central African Republic, Chad, Comoros, Dem. Rep. Congo, Equatorial Guinea, Eritrea, Ethiopia, Guinea, Guinea-Bissau, Haiti, Kiribati, Lao PDR, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mozambique, Myanmar, Nepal, Niger, Rwanda, Sao Tome and Principe, Senegal, Sierra Leone, Djibouti, Solomon Islands, Somalia, South Sudan, Sudan, Tanzania, The Gambia, Timor-Leste, Togo, Tuvalu, Uganda, Vanuatu, Yemen, Rep. and Zambia.

(e) Participation in procedures for the award of procurement contracts or grants financed from the Facility shall be open to all natural persons who are nationals of, or legal persons established in, any country other than those referred to in paragraph 1, where reciprocal access to external assistance has been established. Reciprocal access in the Least Developed Countries as defined by the United Nations (UN) shall be automatically granted to the OECD/DAC members: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Japan, Korea, Luxembourg, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, United States.

3. Services under a contract financed from the Facility may be provided by experts of any nationality, without prejudice to the qualitative and financial requirements set out in the Bank's procurement rules.

4. Supplies and materials purchased under a contract financed from the Facility must originate in a State that is eligible under paragraph 1. In this context, the definition of the concept of 'originating products' shall be assessed by reference to the Bank's prevailing procurement guidelines/procedures, and

products' shall be assessed by reference to the Bank's prevailing procurement guidelines/procedures, and supplies originating in the EU shall include supplies originating in the Overseas Countries and Territories.

5. Whenever the Facility finances an operation implemented through an international organisation, participation in procedures for the award of procurement contracts or grants shall be open to all natural and legal persons who are eligible under paragraphs 1, care being taken to ensure equal treatment of all donors. The same rules apply for supplies and materials.

6. Whenever the Facility finances an operation implemented as part of a regional initiative, participation in procedures for the award of procurement contracts or grants shall be open to all natural and legal persons who are eligible under paragraph 1, and to all natural and legal persons from a country participating in the relevant initiative. The same rules apply for supplies and materials.

7. Whenever the Facility finances an operation co-financed with a third entity, participation in procedures for the award of procurement contracts or grants shall be open to all natural and legal persons eligible under paragraph 1, and to all persons eligible under the rules of the third entity. The same rules shall apply to supplies and materials.

Caveat: The Bank and EU eligibility requirements are subject to change by the Bank and the EU. The applicant is responsible for checking whether there have been any updates on the eligibility requirements, as well as the UN's list of Least Developed Countries.

APPENDIX 10

PROCUREMENT PLAN

I. <u>General</u>

1. **Project Information:**

| Country: | Regional | | | | | |
|---------------------------|---|--|--|--|--|--|
| Grant Recipient: | The University of the West Indies (UWI) | | | | | |
| Project Name: | Preparation of the State of the Caribbean Climate Report 2016: Information for Resilience Building | | | | | |
| Project Executing Agency: | UWI, Mona Campus | | | | | |

- 2. Bank's Approval Date of the Procurement Plan: March 16, 2017
- 3. Period Covered By This Procurement Plan: March 2017 October 2018

II. Goods and Works and Non-Consulting Services

1. **Prior Review Threshold:** Procurement decision subject to prior review by the Bank as stated in Appendix 2 to the Guidelines for Procurement.

| | Procurement Method | Prior Review Threshold | Comments |
|----|----------------------------------|------------------------|----------|
| | | (EUR) | |
| 1. | DC Goods/Non-Consulting Services | | |
| 2. | Shopping/Non-Consulting Services | | |

2. Prequalification: N/A

- 3. Reference to (if any) Project Operational/Procurement Manual: Guidelines for Procurement (2006)
- 4. **Any Other Special Procurement Arrangements**: To comply with the requirements of the ACP-EU Finance Agreement the following is required:
 - (a) Financing shall be provided under ACP-EU-CDB NDRM in CARIFORUM Countries and thus eligibility shall be extended to CARIFORUM member countries and countries which are eligible for procurement under EU-funded projects, which are not CDB member countries, in accordance with the EU Eligibility Rules.

5. **Procurement Packages with Methods and Time Schedule:**

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|------------|---|----------------------------|-----------------------|-----------------------------------|-----------------------------------|---------------------------------|----------|
| Ref No. | Contract (Description) | Estimated Cost (EUR) | Procurement Method | Pre- qualification (Yes/No) | Review by Bank (Prior/Post) | Expected Bid-Opening Date | Comments |
| 1. | Validation and SMART Series Wo | orkshops (5) | | | | | |
| | Venue, catering, workshop material (228 persons) | | Shopping | No | Post | February 2018 | |
| | Airfare – return trip (157 persons) | Shopping | | No | Post | February 2018 | |
| 2. | Report Graphic Design, Printing and Soft Copies Services | | Shopping | No | Post | January 2018 | |
| 3 | Presentation of Report | | | · | | <u> </u> | |
| | Airfare | | Shopping | No | Post | February 2018 | |
| 4. | Production of Workshop Video | | Shopping | No | Prior | ior February 2018 | |
| 5. | Visibility Action | | Shopping | No | Prior | February 2018 | |

III. <u>Consulting Services</u>

1. **Prior Review Threshold:** Procurement decision subject to prior review by the Bank as stated in Appendix 1 to the Guidelines for the Selection and Engagement of Consultants:

| No. | Selection Method | Prior Review Threshold (EUR) | Comments |
|-----|---------------------------------|---------------------------------|----------|
| 1 | Individual Consultant Selection | | |

- 2. **Reference to (if any) Project Operational/Procurement Manual:** Guidelines for Selection and Engagement of Consultants (October 2011).
- 3. **Any Other Special Procurement Arrangements:** To comply with the requirements of the ACP-EU Finance Agreement the following is required:
 - (a) Financing shall be provided under ACP-EU-CDB NDRM in CARIFORUM Countries and thus eligibility be extended to CARIFORUM member countries and countries which are eligible for procurement under EU-funded projects, which are not CDB member countries, in accordance with the EU Eligibility Rules.

4. **Procurement Packages with Methods and Time Schedule:**

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|-----|---|----------------------------|---------------------|-----------------------------------|--|----------|
| No. | Assignment (Description) | Estimated Cost (EUR) | Selection Method | Review by Bank (Prior/Post) | Expected Proposal Submission Date | Comments |
| 1. | Data Collection Analysts /Technical Assistants (10 persons) | | ICS | Prior | June 2017 | |
| 2. | Webpage Design Consultant | | ICS | Prior | June 2017 | |

IV. Implementing Agency Procurement Capacity Building Activities with Time Schedule

1. In this section the agreed Capacity Building Activities are listed with time schedule.

| No. | Expected Outcome/ Activity Description | Estimated Cost | Estimated Duration | Start Date | Comments |
|-----|---|-------------------|-----------------------|------------|----------|
| 1. | Project launch virtual meeting with CDB and Implementing Agency to increase the capacity of Implementing Agency to follow CDB's procurement procedures. | 0 | 1 day | May 2017 | |
| 2. | Increased capacity of Implementing Agency to undertake procurement in accordance with CDB Procurement Procedures through CDB Online Procurement Training. | 0 | 1 day | May 2017 | |

V. <u>Summary of Proposed Procurement Arrangements</u>

| ACP-EU-CDB (EUR) | | | | | | | NBF | Total | | | |
|---|-------------------|-----|-----|-------|----------|----|-----|-------|-------|---------|-------|
| | Primary Secondary | | | Other | | | | | (EUR) | Cost | |
| Project Component | ICB | NCB | RCB | LIB | Shopping | DC | FA | QCBS | ICS | Country | (EUR) |
| 1. Data Collection Analyst/ Technical Assistants | - | - | - | _ | - | _ | - | _ | | - | |
| 2. Webpage Design Consultant | _ | - | - | - | - | - | - | _ | | _ | |
| 3. Stakeholder Workshops in Jamaica | _ | _ | _ | - | | _ | _ | _ | _ | _ | |
| Stakeholder Workshops in St. Lucia | _ | _ | _ | _ | | _ | _ | _ | _ | _ | |
| 5. Report Graphic Design, Printing and Soft Copies Services | - | _ | _ | _ | | _ | - | _ | - | _ | |
| 6. Presentation of Report | _ | _ | _ | - | | _ | - | _ | - | _ | |
| 7. Workshop in Bahamas | - | - | - | - | | - | - | - | - | - | |
| 8. Workshop in Antigua | - | - | - | - | | _ | - | - | - | - | |
| 9. Workshop in Guyana | - | - | - | - | | - | - | - | - | - | |
| 10. Production of Workshop Video | - | - | - | - | | - | - | - | - | - | |
| 11. Visibility Action | - | - | - | - | | _ | - | - | - | - | |

| Sub-Total | | | | | | - | _ | | | | |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|
| 12. Per diem | | | | | - | | | | | | |
| 13. Honorarium | - | - | - | - | - | - | - | - | - | - | |
| 14. Contingency | - | _ | _ | - | - | _ | _ | _ | _ | - | _ |
| Total | - | - | - | - | - | - | _ | _ | _ | _ | |

| CQS | - | Consultant Quality Selection | LIB | - | Limited International Bidding |
|-----|---|-----------------------------------|------|---|----------------------------------|
| DC | - | Direct Contracting | NCB | - | National Competitive Bidding |
| FA | - | Force Account | NBF | - | Non-Bank Financed |
| FBS | - | Fixed Budget Selection | QCBS | - | Quality and Cost-Based Selection |
| ICB | - | International Competitive Bidding | RCB | - | Regional Competitive Bidding |
| | | | ICS | - | Individual Consultant Selection |

This information is withheld in accordance with one or more of the exceptions to disclosure under the Bank's Information Disclosure Policy.