



UNITED NATIONS

**ECLAC**

TERMS OF REFERENCE FOR

**HEALTH SECTOR EXPERT**

REVIEW OF THE ECONOMICS OF CLIMATE CHANGE IN THE CARIBBEAN  
**PHASE II**

**Background**

Caribbean societies can be broadly characterized as small open economies that are largely service and natural resource-based, with varying levels of poverty and inequality, low levels of social protection, significant external international migratory flows, and significant levels of social exclusion. They are also societies that are facing serious challenges in the interaction between the human population and the environment that sustains them, an underlying stress that is being exacerbated by climate change. Given the nature of their economies, they are particularly vulnerable to the impact of natural disasters that can result in the widespread destruction of the productive economy, mainly through the capital stock. The interruption of the production of goods and services can be particularly devastating in an environment where few large sectors (agriculture, tourism and mining) dominate the economic landscape. This pattern of development means that these societies are facing the impacts of climate change with serious disadvantages, hence the urgency to address the environmental, social and economic dimensions of climate change concurrently and in an integrated manner. The consequences of climate change for the Caribbean will make it increasingly difficult to respond to the challenges of vulnerability and social exclusion in the pursuit of poverty reduction and the achievement of the Millennium Development Goals (MDGs). At the 13th Meeting of United Nations Framework Convention on Climate Change (UNFCCC), it was recognized that there is a need to: (a) assess the impacts of climate change on development in Latin America and the Caribbean (LAC); (b) understand the distribution of these impacts within the LAC region, given the diverse geographical, economic and social structures of LAC countries and the special needs of the Caribbean SIDS; and (c) mobilize decision makers to undertake specific actions to address these impacts.

In the context of international initiatives on climate change and the challenges that climate change pose for regional development, the United Nations Economic Commission for Latin America and the Caribbean (UNECLAC) sub-regional headquarters for the Caribbean (ECLAC-POS) and Mexico (ECLAC-Mexico), and the Department for International Development (DFID) of the United Kingdom of Great Britain and Northern Ireland are embarking on an initiative that seeks to address the impending global and regional impacts of climate change as articulated in the 4<sup>th</sup> Report of the Intergovernmental Panel on Climate Change (IPCC). As such a project document entitled “Review of the Economics of Climate Change in the Caribbean” has been jointly prepared by ECLAC and DFID. The ultimate direct objective of the project is to assess the likely economic impacts of climate change on key sectors of the

Caribbean<sup>1\*</sup> economies, conduct economic analyses of adaptation measures, and to stimulate governments, regional institutions and private sector actions to develop and implement policies to mitigate and adapt to climate change.

### **Objectives of the Project**

The project would comprise three phases of which Phase 1 have been completed and Phase 2 would be implemented over the period November 2009 to March 2011. The major objectives of the Second Phase are firstly, the co-ordination, planning and implementation of the project; secondly to conduct country studies in at most three of the most vulnerable sectors to climate change impacts in the states participating in this study as specified by the project activities; while the objective of the Phase 3 is to conduct sector studies and organize activities for strengthening institutional and scientific capacities in the Caribbean Region.

In order to facilitate the successful implementation of the Second Phase of the project, ECLACPOS will be recruiting national consultants, where possible, to conduct several national studies included in project activities.

### **Scope of Work**

The consultants will be expected to conduct the necessary research and written analysis required in order to deliver a report on human health sector and climate change. Consultants are expected to work in close collaboration with ECLAC staff members and ECLAC consultants along with the Caribbean Community Climate Change Centre (CCCCC), Caribbean Community (CARICOM) and other institutional stakeholders throughout the Caribbean region. Consultants are expected to conduct field-missions and participate in stakeholder consultations during the process of preparing the reports. The consultants may also have to present the findings of the studies at scheduled seminars/conferences.

### **Methodology**

#### **THE HUMAN HEALTH SECTOR**

- Creation of a country baseline. Diseases related to weather, climate and water. For example, dengue, malaria, leptospirosis, and gastroneeritis.
- Main risk factors and of factors (climatic and non-climatic) that increase the sector's vulnerability,
- Construction of scenarios without CC impacts, with CC impacts using various emissions trajectories, and with CC impacts that are being mitigated. The Consultant will also

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<sup>1</sup> In this context 'the Caribbean' refers to the following island economies: Anguilla, Aruba, Antigua and Barbuda, the Bahamas, Barbados the British Virgin Islands, Cuba, Dominica, Dominican Republic, Grenada, Haiti, Jamaica, Montserrat, the Netherlands Antilles, Puerto Rico, Saint Lucia, St Kitts and Nevis, St Vincent and the Grenadines, Trinidad and Tobago and the United States Virgin Islands. It also includes Suriname, Belize and Guyana which, whilst non-islands, are usually considered small-island developing States (SIDS) as they have 'island-like' features. The French overseas territories of Martinique and Guadeloupe are not associated with the ECLAC Subregional Headquarters for the Caribbean.

construct socio-economic impact scenarios based on CC related impacts. As far as possible, these scenarios will seek to examine cross-sectoral impacts, impacts on gender and livelihoods.

- Estimate the costs on the health sector and national economy with and without CC related impacts.
- Evaluation of adaptation options and strategies, along with their costs and benefits.
- Models used in carrying out the analyses and the justification for using such models.

#### Activities will include

- Coordinating with ECLAC staff members on the scope of the report
- Coordinate with other national consultants to ensure the linkages, complementarities and synergies are established across the various studies.
- Coordinating and planning with ECLAC staff members the field work missions to be conducted in the health and related sectors. The consultants will plan with ECLAC staff the list of institutions to visit, the sectors to be covered and the list of data and studies to be collected;
- Conducting field work missions and lead stakeholder consultations, along with other consultants recruited by ECLAC. This will include consultations with national government (including climate change focal points in relevant ministries, climate change working groups, UNFCCC national communications working groups); regional organizations; civil society; academia and the United Nations system;
- Reviewing and collecting data and studies socioeconomic, environmental and climate change aspects in the Caribbean. This should include data and information compiled and used for reports to international agencies.

Conducting the analysis over the next 90 years, i.e., up to 2100 broken up into various periods as the scenarios may warrant.

#### **Deliverables:**

Key outputs will include:

- A draft with a complete assessment of a baseline scenario for the sector including current health costs assessment,
- Analysis of risk factors for the sector that increase vulnerability
- Scenarios of CC that may lead to increased morbidity and mortality and presentation of economic analyses related to these various scenarios under a business as usual approach *vis-a-vis* the implementation of adaptation measures.
- Adaptation options and strategies for the sector, including an assessment on costs and benefits of adaptation
- Participation in stakeholder consultations during the conduct of field work missions in the health sector.
- Mission reports for each country in which a mission was conducted;
- Presentation of the main findings of reports in Expert Meetings (comments gathered during that meeting will be addressed by the consultants to revise the reports).

## **A. Reporting**

- Prepare a draft report in Microsoft Office 97-2000, using Font Times New Roman 12;
- Finalise the report for submission to ECLAC by 14 August 2010.

### **Deliverables:**

Key outputs will include:

- By 31 May 2010, a 1<sup>st</sup> draft national report that would present the available data for the state;
- By 15 July, a 2<sup>nd</sup> draft national report incorporating preliminary comments from stakeholders;
- By 14 August, a final report that would incorporate the comments of relevant stakeholders from the Caribbean.

The study and all other related work produced by the consultant during the execution of this consultancy will be the exclusive property of ECLAC.

### **Duration**

The contract will be for 6 months for the period 15 February to 14 August 2010.

### **Salary**

The consultant shall receive a remuneration of US \$ 6,000 for the whole period of the contract to be paid in 2 installments. The first installment of 40% will be paid after submission and acceptance of the first draft by 31 May 2010 by ECLAC and the CCCCC, and 60% will be paid with completion of the reports and once the reports are finalized and approved by ECLAC and the CCCCC and after the incorporation of comments and suggestions from various stakeholders by 14 August 2010. In the course of field work missions and for presentations at meetings, the consultant shall receive a Daily Subsistence Allowance (DSA) per night of stay in the country where work is being conducted, according to prevailing United Nations rates. ECLAC shall cover all travel-related expenses (air fares and terminal expenses only and DSA per night) during the course of the mission.

### **Qualifications**

#### Education

Advanced university degree in physics, environmental management or any other relevant field. A combination of relevant academic qualifications and experience may be accepted in lieu of the advanced degree.

### Work Experience

At least 7 years of professional experience in the area of environmental economics, environmental management or any other relevant work area (either in teaching, policy formulation at government, regional and international level, or academic research). Experience in climate-change related issues such as assessment of the economics of climate change, climate change adaptation and mitigation, as demonstrated by a record of publications, academic research or involvement in climate-change policy formulation, will be a strong asset.

### Languages

Fluency in written and spoken English; working knowledge of Spanish will be an asset.

### Competencies

Ability to work as part of a multi-cultural team; strong communication skills including an ability to facilitate consensus in meetings and consultations; ability to present complex concepts and technical studies in a clear, concise manner and to adapt language, tone, style and format to match the audience; excellent drafting ability.