

# **IIED Climate Change, Tourism and Socio-Economics Workshop, Tobago**

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**Summary of the Review of the Economics of  
Climate Change (RECC) Project**

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# Objective

- Assess the likely economic impacts of climate change on key sectors of the Caribbean economies, to stimulate governments, regional institutions and the private sector to develop and implement policies to mitigate and adapt to climate change.

# Review of the Economics of Climate Change

- Phase 1: 1 October 2008 to 15 March 2009.
- Caribbean Countries: Anguilla, Aruba, Antigua and Barbuda, the Bahamas, Barbados, Belize, the British Virgin Islands, Cuba, Dominica, Dominican Republic, Grenada, Guyana, Haiti, Jamaica, Montserrat, the Netherlands Antilles, Puerto Rico, Saint Lucia, St. Kitts and Nevis, St Vincent and the Grenadines, Suriname, Trinidad and Tobago and the United States Virgin Islands.
- Cooperating Agencies: CARICOM, Caribbean Community Climate Change Centre (CCCCC), the Department for International Development (DFID), United Kingdom of Great Britain and Northern Ireland

# Review of Economics of Climate Change in the Caribbean Project

## Phase 1 Activity: Scoping exercise

- Map existing and expected research on climate change in the Caribbean (impacts of climate change, adaptation and mitigation options and costs)
- Determination of whether data are sufficient, and identification of research gaps
- Determination of feasibility of project
- Comparative Analysis of: Caribbean Environment Outlook (2005); Climate Change: Impacts, Vulnerabilities and Adaptation in Developing Countries (2007); Human Development Report 2007/2008. The Stern Review (2006); IPCC Fourth Assessment Report, 2007.

# Countries Visited



# Preliminary Findings of the Study

## Climate Change Initiatives

Five of the six CARICOM countries reviewed had completed a significant amount of work on climate change. This work includes:

- Vulnerability Assessments
- Impact Studies
- Modeling
- Greenhouse Gas Inventories as part of their First National Communication to the UNFCCC
- National Capacity Self Assessments for Adaptation to Climate Change

# Review of Economics of Climate Change in the Caribbean

- Most of this work was conducted under CARICOM Regional climate change projects:
  - Caribbean Planning for Adaptation to Climate Change (CPACC) – funded by the Global Environment Facility (GEF);
  - Enabling Activities – funded by the GEF
  - Adapting to Climate Change in the Caribbean (ACCC) – funded by the Canadian International Development Agency;
  - Mainstreaming Adaptation to Climate Change (MACC) – funded by the GEF;

# Review of Economics of Climate Change in the Caribbean

## Institutional Framework

- Those countries that have ratified the UNFCCC have in place, Ministries responsible for climate change, designated UNFCCC focal points, and national climate change committees. Climate Change Committees are multi-sectoral and may also include representation from the private sector and civil society organizations.
- A number of CARICOM countries also have operational national Sustainable Development Councils (SDCs). The establishment of SDCs was supported by the United Nations Development Programme (UNDP) Capacity 21 programme.
- Further, all countries have disaster management institutions in place, and their work is often linked to climate change.



# Review of Economics of Climate Change in the Caribbean

## Policy Framework

Guyana has completed their “*National Climate Change Adaptation Policy and Implementation Plan*” in 2002.

St. Lucia’s Climate Change Adaptation Policy and Action Plan was adopted by Government in 2003.

These measures aim to ensure that climate change adaptation becomes formally integrated into all plans, policies and programs at the national and community levels. These policy documents established, for the first time, a national adaptation planning and management framework based on an integrated “ecosystem” approach firmly established within the national planning context.<sup>9</sup>

# Review of Economics of Climate Change in the Caribbean

## Vulnerable Sectors

All countries agreed that the key sectors which are most vulnerable to climate change impacts are: tourism, agriculture and health. These sectors were considered because of their contribution to GDP, employment and human well-being – without which economies cannot prosper.

Energy and water resources were in most instances, regarded as cross cutting themes.

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## Main Obstacles to Climate Change Adaptation

The following major obstacles to climate change adaptation activities have been identified for the Caribbean (consistent with global concerns):

1. lack of resources – financial and technical;
2. limited awareness at the policy level;
3. lack of available capacity to develop decision support tools for policy makers;
4. lack access to appropriate technology for adaptation on favourable terms
5. Limited country or region-specific decision-making tools (CBA) to facilitate policy support for responding to climate change

# Review of Economics of Climate Change in the Caribbean

## Research Needs and Gaps Requiring Action

- Technical training in the downscaling and use of climate models
- Limited science-policy interface that prevent policy makers making climate change preparedness decisions on the basis of the best information
- Limited regional adaptive capacity to address climate change risks and vulnerability
- Data collection and recovery (digitisation; time series).
- Public awareness – especially for policymakers
  - More sector-specific impact studies where they do not exist
  - the identification of policy options that would be necessary to adapt and mitigate.
  - Costing of climate change impacts and response options.<sup>12</sup>

# Project Rationale and Feasibility Considerations

- GCC represents a significant threat and a drain on public resources that will affect fiscal prudence in many Caribbean States.
- Hurricanes, floods, disease outbreaks, pest infestations, and degraded infrastructure associated either directly or indirectly with climate change.
- The Region's tourism, agriculture, forestry, and fisheries sectors and its water resources are deemed to be most vulnerable to damage from CC.
- Little attention has been paid to the health and trade impacts, or the implications for costly and possibly frequent infrastructure reconstruction.
- There *are* several adaptation options/interventions, but these need to be quantified and assessed to arrive at the most efficient for the region

# Comparative analysis: the Cost of Adaptation for Developing Countries

- The UNFCCC report estimates that developing countries will require between USD 28.67 billion by 2030,
- the Human Development Report 2007/08 estimates USD 86 billion by 2015.
- The Stern Review does not provide a clear estimate of the adaptation costs for developing countries.
- Similarly, the IPCC Fourth Assessment Report indicated that there is as yet no clear picture of the costs of adaptation because adaptation measures are highly dependent on specific geographical and climate risk factors.

# Other Findings and Considerations

- Many studies, particularly in the English Speaking Caribbean
- Fairly good meteorological and other data to start
- We have the expertise in the region
- We have tools (PRECIS model, NAIDE in use in the EU and in Cuba, POLESTAR in use for GEOLAC and GEOCUBA, LEAP, in use in Cuba)
- ***BUT:***
  - Do not have all the data needed for robust modelling (Limited modelling analyses may lead to inappropriate adaptation options, causing Caribbean economies to be more reactive and divert scarce resources away from development projects to relief and reconstruction arising from GCC-related events. )

# What is next?

## PHASE II

- REGIONAL AND SECTORAL STUDIES

DEVELOPMENT OF PUBLIC  
POLICY OPTIONS, DRAFTING  
AND DISSEMINATION OF THE  
REPORT

## PHASE III

COUNTRY STUDIES (*in all 24  
States on the most important  
sectors*)



*Thank you.*