

Experiences on Data and Observational Requirements in the Caribbean

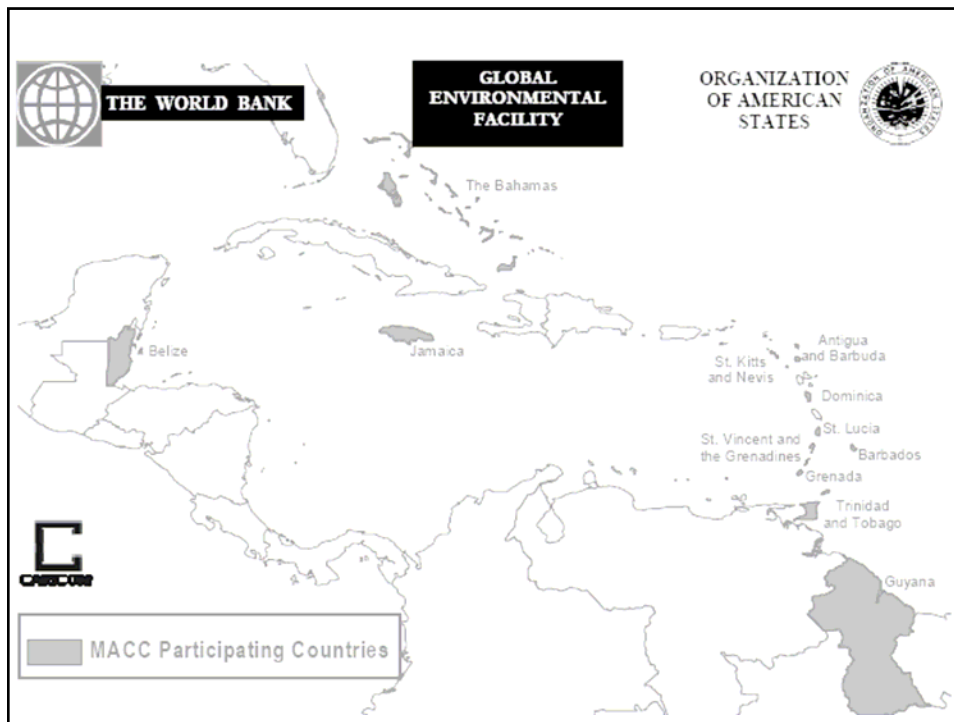
UNFCCC Expert Workshop on Methods & Tools and on
Data & Observations under the NWP on Impacts,
Vulnerability & Adaptation to Climate Change

Mexico City, 4 – 7 March 2008

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CCCCC

- Established by CARICOM Heads of Government to coordinate the region's response to the challenges posed by climate change
- This includes the development and implementation of projects
- Providing technical advice and consultancy services
- Collaboration with regional and international organizations on climate change activities



MACC Project

- Stage II Adaptation Project with observing components
- Installation of 11 tide gauges & AWSs
 - Trinidad and Tobago installing additional 9 tide gauges & AWSs
- Installation of CORS stations
 - Monitors tectonic movement
- Installation of CREWS station in Jamaica
 - Water quality including pH, acidity

Downscaling

- PRECIS model – Hadley Centre
- Regional collaboration
 - INSMET (Cuba)
 - UWI Mona (Jamaica)
 - UWI Cave Hill (Barbados)
 - CCCCC
- Uncertainty
 - Different PRECIS runs and outputs from Japanese Earth Simulator

Interpretation of Model Outputs

- Need to enhance national capacities
- Staff of National Meteorological Services busy with routine operational work
- Possible Solution: Meteorologists can undertake interpretation of their country's model outputs during study tours or sabbaticals at the CCCCC

Pilot Vulnerability Assessments

- Bahamas – Tourism
- Belize – Water Resources (Surface Water)
- Guyana - Agriculture
- Jamaica – Water Resources (Ground Water)

- Experiences will be shared at regional workshops
 - Regional workshop in Guyana on use of agriculture tools April 14-25,2008 for 2 experts per country
 - Using regional expertise (Cuba)

Consultancy Services

- Guyana requested advice on flooding in Georgetown
- CCCCC assembled team of meteorologists, hydrologists and emergency management specialists
 - CCCCC, CIMH, University of Louisville, Belize Met. Service
- Consulted with relevant agencies in Guyana
- Team provided government with technical advice including deployment of rain gauges and river gauges

Collaboration

- Co-sponsored along with GCOS Secretariat the “Meeting on Furthering the Implementation of the GCOS Regional Action Plan for Central America and the Caribbean” held in Belize City, Belize from 28 to 30 January 2008.
- Convened regional and international agencies involved in project development, project implementation and project funding to promote the implementation of the Regional Action Plan

Project Proposals

- Provision of Additional and Better Upper Air Observations to Climatological Centres
- Creating and Sustaining a Regional Technical Support Centre
- Improving Access to Climate Data in the Region
- An IOCARIBE-GOOS Partnership to Support a Multi-Use Sea Level Observation Network for the Caribbean region
- Adapting to Climate Change: Raising Awareness in Central America and the Caribbean

Funding Agencies

- Canada - Announced additional financial support to GCOS
- Caribbean Development Bank – Not interested in supporting observing programmes, but very interested in funding data rescue and data management projects
- World Bank – Funding projects with observing components
- Italy – Interested in projects with regional character through a recognized regional institution

Data Requirements

- Upper Air and surface weather observations
 - Rainfall rates
- Marine observations
- Hydrological observations
 - Groundwater
- Ecological and phenological observations
- Soil data
- Bathymetry and topography
- Crop Yields

Other Requirements

- Data Rescue
- Recovery of data
- Data Management

Opportunities

- Complete implementation of data management projects
 - CLIDATA and CLISOFT
- Strengthen regional data centres in Caribbean and Central America to create authoritative climate data sets
- Coordinate and strengthen sub-regional Climate Outlook Fora
- Assist in establishment of Regional Climate Centre (RCC) for WMO RA IV

Opportunity

- Develop regional mobile LIDAR capacity
- Bathymetry and topography
- Land use
- Utilizing regional expertise
- Access to laboratories
- Funding required to procure hardware and design mounting system

