

SPECIAL ADAPTATION TO CLIMATE CHANGE (SPACC) PROJECT - CARIBBEAN

UNFCCC Technical Workshop on Costs and Benefits of Adaptation Options under the NWP

Madrid, Spain
22 – 24 June 2010

Carlos Fuller
Deputy Director

Caricom Climate Change Centre

The Caribbean Community Climate Change Centre

- Endorsed by the CARICOM Heads of Government in July 2002
- An intergovernmental specialized agency of CARICOM with an independent management that is guided by
 - The CARICOM Council of Trade and Economic Development (COTED) on policy matters.
 - A board of directors with responsibility for strategic planning.
 - A technical secretariat headed by an Executive Director with responsibility for tactical planning.
- The Centre is mandated to coordinate the regional response to climate change and its efforts to manage and adapt to its projected impacts.
- The Centre possesses full juridical personality.
- Financially independent



◆ Operational since
January 2004

◆ Located in
Belmopan, Belize

Caricom Climate Change Centre

SPACC Participating Countries and Pilot Sites

- Commonwealth of Dominica (Morne Diablotin and Trois Pitons);
- Saint Lucia (Castries and Vieux Fort areas); and
- St. Vincent and the Grenadines (Bequia);

Caricom Climate Change Centre

Objectives

- To support the efforts of Dominica, Saint Lucia and St. Vincent and the Grenadines to implement specific (integrated) pilot adaptation measures addressing the impacts of climate change on their natural resource base, focused on biodiversity and land degradation along coastal and near-coastal areas

Caricom Climate Change Centre

Project Management Structure

- Funding Institution – Global Environmental Facility (GEF)
- Implementing Agency – World Bank
- Executing Agency – Caribbean Community Climate Change Centre (CCCCC)

Caricom Climate Change Centre

Project Management Structure (continued)

- Project Manager based at CCCCC in Belize
- Permanent Secretaries from Ministries of the Environment from participating countries
- National Focal Point (NFP) from participating countries
- National Coordinators based in each of the participation countries and
- NGOs, CBOs from participating countries

Caricom Climate Change Centre

SPACC Financing Plan US Dollars

- TOTAL COST - \$5.44 million
 - GEF - \$2.10 Million
 - Governments of three participating countries - \$1.50 Million (\$0.50 Million each)
 - Meteorological Research Institute (MRI) of Japan - \$1.39 Million (under review)
 - International Conservation Union (IUCN) - \$0.13 Million (dropped)
 - Government of Italy (GOI) - \$0.32 Million (dropped)
 - Others to be determined (possible FAO) - \$0.00

Project Components

Component 1

- Identification, Evaluation, Selection and Design of priority adaptation measures addressing impacts of climate change on biodiversity and land degradation. Cost - US\$0.38 million

Component 2

- Implementation of Adaptation Measures. Cost - US\$1.30 million

Project Component 2

Sub-Component 1

- *Coordination of adaptation measures in the participating countries*

Sub-Component 2

- *Implementation of adaptation measures in the biodiverse Morne Diablotin National Park and its neighbouring communities (Dominica) identified in the updated management plan*

Sub-Component 3

- *Morne Trois Pitons National Park Integrated Ecosystem Management in Dominica*

Caricom Climate Change Centre

Project Component 2 (continued)

Sub-Component 4

- *Sustainability of water resources and supply of the Vieux-Fort Region of Saint Lucia*

Sub-Component 5

- *Strengthened critical coastal infrastructure in the Castries area of Saint Lucia*

Sub-Component 6

- *Integrated ecosystem approach to Climate Change in Bequia and Union Islands (St. Vincent and the Grenadines)*

Sub-Component 7

- *Climate Change risk management for Spring Village (St. Vincent and the Grenadines)*

Caricom Climate Change Centre

Project Components

Component 3

- Strengthen national capacity to implement multiple Multi-lateral Environmental Agreements (MEA). Cost - US\$0.85 million

Component 4

- Project Management. Cost - US\$0.29 million

Caricom Climate Change Centre

Key Performance Indicators

- Preserve the ecosystem functioning in Morne Diablotin and Morne Trois Pitons National Parks in Dominica (under review)
- Maintain the health of coastal ecosystems in the Vieux Fort area (under review)
- Incorporate lessons from strengthening of key infrastructure into local hazards management plan and building guidelines in Saint Lucia
- Stabilize population of 25 ha of remaining Black Mangrove (*Avicennia sp*) stands in Union Island (under review)

Caricom Climate Change Centre

Key Performance Indicators (continued)

- Complete Bequia integrated natural resource management plan, including climate change concerns and incorporate into national planning process. (under review)
- Stabilize diversity of coral reefs and associated species (under review)
- GEF uses the lessons learned in at least one GEF adaptation project and applies the experience with performance indicators by incorporating them into adaptation guidelines for adaptation

Caricom Climate Change Centre

INFRASTRUCTURE - DEVELOPING "CLIMATE PROOF" BUILDING CODES FOR SAINT LUCIA

Revision of Hurricane Wind Speed Information developed by Professor Curry et al (Georgia Tech University) by the consultants, International Codes Council (ICC). The hurricane studies developed by Curry et al considered the impact of climate change on the intensity and frequency of hurricane in the Saint Lucia area.

Technical translation of the Curry et al study into wind speed adjustment factor for critical buildings by Dr. Peter Vickery, wind expert, working for ICC. An increase in design wind speed of 15% was computed.

Development of engineering guidelines by ICC Consultant, Tony Gibbs, based on computed wind speed design.

Incorporation of the Engineering Guidelines by the Saint Lucia government into its building codes presently in draft form.

Re-design of the planned retrofitting of the Marchand Community Centre in Castries, incorporating the new engineering guidelines. The Marchand Centre serves as a hurricane shelter for residents in that area and as a telecommunication center for the Saint Lucia National Emergency Management Organization (NEMO).

Caricom Climate Change Centre

SPACC Achievement Castries, Saint Lucia

- **Workshop in Castries – Engineering Guidelines**
- **Impact of Climate Change – Increased frequency and strength of tropical cyclones**
- **Adaptation – Development of hurricane wind speed adjustment information and new engineering guidelines for Saint Lucia**



Caricom Climate Change Centre

SPACC Achievement Castries, Saint Lucia Benefits

- **Next Steps – Redesign of planned retrofitting of the Marchand Community Centre in Castries using the new Engineering Guidelines**
- **Carrying out the retrofitting (co-financed by the Government of Saint Lucia)**
- Value of building & contents – quantifiable
- Hurricane shelter - ???
- Contribution to national warning and response

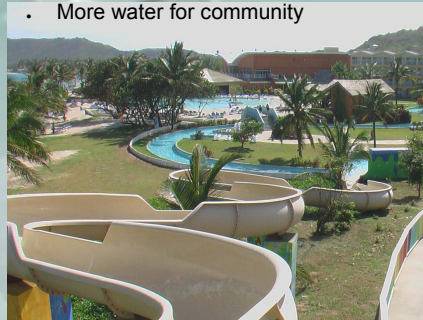


Caricom Climate Change Centre

Impact of Climate Change – Reduced availability of fresh water Benefits

- **Pilot Intervention Vieux Fort, Saint Lucia**
- **Adaptation –Installation of Water Conservation System at the Coconut Bay Resort (2nd largest consumer of water in the Vieux Fort area) – DESIGN BEING FINALIZED**

- Reduced payments for water
- More water for community



- Security of attraction – Resort more financially viable

Caricom Climate Change Centre



Bequia, St.Vincent and the Grenadines

Impact of Climate Change
– Availability of Fresh
Water



Caricom Climate Change Centre

Bequia, St Vincent and the Grenadines



Benefits

- Water available to community
- More time available for productive work
- More water available for ecosystems
- Technology transfer

Adaptation Measure Identified –
Installation of a SWRO potable water system powered by renewable energy in Paget Farms area of Bequia

Caricom Climate Change Centre

Morne Diablotin and Morne Trois Pitons, Dominica

- Technical Forum (October 2009) of local, regional and international experts familiar with the two National Parks identified 3 set of activities:
 - 1) Revise Management Plan and Buffer Zones for both parks considering climate change impacts
 - 2) Improve data collection and monitoring in the Parks – Identify and install climate equipment in the parks
 - 3) Provide alternate livelihood for the neighbouring communities – irrigation, greenhouses

Caricom Climate Change Centre

SPACC Project Contact Information

CARIBBEAN COMMUNITY CLIMATE CHANGE CENTRE

2nd Floor, Lawrence Nicholas Bldg.

P.O. Box 563

Bliss Parade,

Belmopan City, Belize

Tel: +501-822-1094/1104

Fax: +501-822-1365

Website: www.caribbeanclimate.bz

Caricom Climate Change Centre