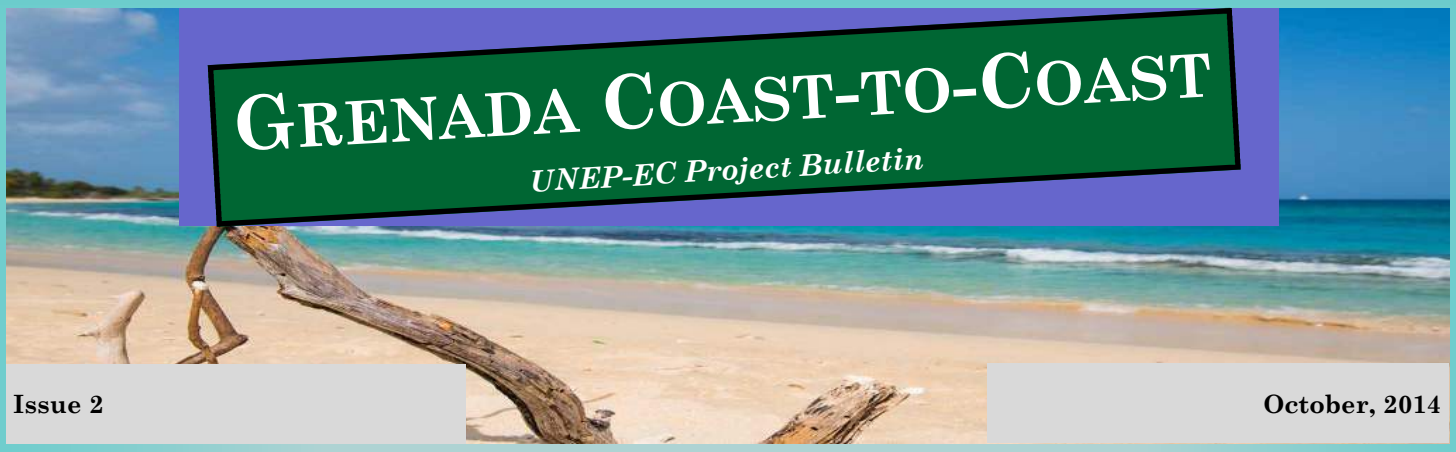

GRENADA COAST-TO-COAST

UNEP-EC Project Bulletin

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"Building Capacity for Coastal Ecosystem-based Adaptation (EbA) in SIDS"

Inside this issue:

Points of Interest:

* Technical Workshop from November 11—12, 2014 from 8:30 AM—4:00 PM at the Grenada Trade Centre.
* Project Implementation anticipated to commence during the first quarter of 2015!
* Terms of Reference to contract a suitably qualified person/company to design and manage a project website will be published soon.

INCEPTION: LAUNCH OF THE COASTAL EBA PROJECT IN GRENADA by Leyana Romain

The Coastal EbA Project was officially launched in Grenada in 2014. with an inception workshop held at the Grenada Red Cross on April 29 and April 30, 2014.

The four main objectives of the workshop were to:

1. increase awareness of EbA for Coastal Ecosystems in Grenada;
2. engage national stakeholders/ development partners in identification of national priorities;
3. initiate preliminary discussions on potential demonstration sites for practical EbA interventions; and
4. exchange ideas on capacity building needs in Grenada relevant to coastal EbAs.

Discussions from the workshop highlighted some key priorities for consideration of any EbA intervention:

Communication

The need for improved communication and coordination among government ministries, in relation to environmental governance and enforcement was suggested. An Integrated Coastal Zone Management Unit was recommended to coordinate all components of environmental management, and a senior management board was proposed to communicate and share information.

Data

A central database was recognized as crucial for allowing access to and sharing of data and other information on Grenada with the public and policy and decision makers. In addition, Indigenous Traditional Knowledge (ITK) was encouraged as a source of information in data collection.

Public Education

Finding innovative ways to raise awareness of environmental issues to decision makers and the wider public was identified as crucial. More attention on inland effects on the coastal zone and the link between actions and environmental and livelihoods' impacts was also proposed.

Sustainable Use of Natural Resources

The notion that laws regulating fishing and hunting require strengthening through monitoring, evaluation and more transparency was raised.

Development of sustainable alternative livelihoods

The need to develop alternative livelihoods' strategies focused on environmental protection and sustainability was emphasized.

Analysis of policies and legislation

The challenges to management due to the absence of a Land Use Policy and Coastal Zone Management Plan was articulated.

Community Involvement.

A peer review mechanism at the community level was suggested to facilitate the monitoring and evaluation of projects for visible outcomes that impact community needs. ♦

Where Are We? Project Status Update

The Coastal EbA project is divided into 5 components:

A. EbA planning and decision support tools and associated guidance resources developed and tested in SIDS;

B. Social-ecological climate change vulnerability scenarios of coastal ecosystems developed for planning and decision-making;

C. Implementation plans on concrete EbA interventions developed and operationalization initiated for two pilot sites;

D. Enhanced regional capacity and knowledge on coastal EbA scenario development and planning among Caribbean SIDS;

E. Enhanced global knowledge on coastal EbA scenario development and planning in SIDS, including synthesis of lessons and good practices on effective EbA

Currently, the project is at the Component B phase, which is the national integrated social-ecological vulnerability scenario and cost-benefit analysis. For this component, climate change vulnerability scenarios will be developed based on existing data on the social and ecological status and trends of our tropical coastal ecosystems. In addition, the ecosystem services provided to coastal communities, as well as the vulnerability to climate change, will be mapped and potential adaptation responses with the associated initial cost-benefits will be outlined.

A key outcome of component B will be proposals for two sites for the implementation of pilot projects. For these locations only, additional data collection exercises will be conducted to more accurately inform recommendations of intervention options.

The activities under component B will culminate with a technical participatory workshop in the month of November. At this seminar, the findings of the research period will be presented in a forum that shall support robust discussion and debate. Participants will especially be called upon to accomplish two main tasks – it is anticipated that members will endorse the suggested project sites and then prioritize the proposed intervention options – by the conclusion of the two-day workshop.

The fulfillment of the second stage of the program is an essential stepping stone to project implementation, and active involvement and dialogue, especially at the workshop level, will significantly contribute to this. Contingent on a successful outcome from this phase, the kickoff for component C is projected for the first quarter of 2015! ♦

The CARIBSAVE Partnership: More About the Organization

The Project partnered with CARIBSAVE to conduct integrated social-ecological vulnerability assessments for its component B. Presentations on the findings and prioritization of EbA options will be made at a technical workshop _ to be held on November 11 and 12 2014.

INTASAVE-CARIBSAVE is a not-for-profit organization specializing in climate change solutions and sustainable international development. They operate in 40 countries around the world with offices in Africa, China, Europe, United States, Malaysia and Jamaica, with a Regional Headquarters in Barbados.

Their work has included: implementing skill share between China and the developing world; designing and implementing solar-nano grid systems; assisting with climate change planning for governments, communities and businesses; supporting and developing micro, small and medium enterprises; quantifying socio-economic and environmental climate change risk, loss and damage; strengthening management of marine protected areas; designing and implementing strategies for coastal protection; designing indicator systems for sustainability, and communicating complex ideas; and democratizing science.

The organization makes a difference by creating effective partnerships and working across sectors to ensure resources and funding are managed wisely and efficiently.

The team that conducted the assessments in Grenada was headed by Dr. Owen Day—Chief Technical Officer and Head of Biodiversity at the institution. It further consisted of Dr. Donovan Campbell, Prof Danika van Proodsdj, Simone Lee and Greg Baker. In addition, Joyce Thomas Calliste was contracted as the CARIBSAVE National Coordinator for the project. ♦

Detailed Social-Ecological Vulnerability Scenarios: Data Collection

On October 3 – 10, field work was conducted in Grenada and Carriacou by the CARIBSAVE team. Tasked with the development of detailed social-ecological vulnerability scenarios for 2 demonstration sites, the team focused on collecting data at Grand Anse and two sites in Carriacou: Windward and Lauriston.

The main focus of the trip was to gather spatial data on coastal features, built features and shore protection, and to record evidence of shore stability . These features were marked using a GPS enabled YUMA tablet and the most recent satellite imagery.

In some cases, GIS was validated by ground "truthing" the location of key ecosystems, for instance coral reefs and sea grass beds, and marking these locations with a handheld GPS.

In other instances, semi-structured interviews were conducted with community members to gather historical information on coastal features that were present before; livelihoods; and shore protection mechanisms.

Beach profiles were also obtained by recording elevation changes, along a transect that will later help to get information on variations along the shoreline.

Additionally, a coastal vulnerability multi-criteria analysis was performed using criteria of exposure, biophysical state and resilience. The criteria are as follows:

1) Exposure conditions (fetch, dominant wind/wave direction, shoreline orientation, tidal state)
2) 2) Biophysical state (geomorphology, built features, erodibility, slope, elevation)
3) Resilience condition (eco-morphological resilience capacity, sediment budget, relaxation time)
4) Adaptive capacity (political, financial, cultural/social)
5) Adaptation response (shoreline protection, retreat, abandon)

The building capacity aspect of the field work entertained 6 trainees from Grenada and 10 from Carriacou. The trainees were given the opportunity to learn about how to identify coastal features ; how to translate such information onto a GPS tablet; how to conduct a beach profile; and how all the data is used for analysis.

The trainees represented different government ministries including: Physical Planning Unit, Land Use Division, Fisheries Division, the GIS volunteer group within the Environment Division, Carriacou and Petite Martinique affairs and MPA wardens within the Carriacou Sandy Island Oyster Bed MPA. ♦

Building Capacity for Coastal Ecosystem-based Adaptation in SIDS"

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About this Newsletter

This monthly e-bulletin is an initiative of the UNEP-EC EbA Grenada Project Office to assist with dissemination of information to all stakeholders and interested parties. It will also be a benefit to all who endeavor to deepen their understanding of the phenomenon of climate change and its current and projected impacts on SIDS, in particular Grenada, and seek to explore new strategies to build national resilience.

Your comments/feedback/suggestions are always welcome and appreciated. Please feel free to contact the Project Unit with your input!

Please indicate to the Project Unit if you would like to be included on the monthly email list.

UNDERSTANDING VULNERABILITY by Kerricia Hobson

The term 'vulnerable' is often used to describe SIDS, but what does it mean? Vulnerability describes a "proneness to damage from external shocks", whether natural or anthropogenic. It can be economic, environmental and social.

Small states are especially vulnerable due to a number of characteristics that make them particularly susceptible to extrinsic forces. Some factors that contribute to the economic vulnerability of SIDS include: small domestic market and dependence on export; limited ability to exploit economies of scale and for diversification; inability to affect international market prices; and supply uncertainties due to remoteness and insularity i.e. accessibility only by air or sea.

Pressures from economic development related to demand for residential housing and industrial buildings are often much higher on the environment in SIDS, which often have very unique and fragile ecosystems. The coastal zone also tends to be at risk from the strain of tourism, fisheries and other marine related activities, as well as from exposure to wave action and winds. In addition, many SIDS are located in tropical regions and exposed to natural disasters such as cyclones, tsunamis and coastal flooding. Many are also of volcanic origin and experience volcanic eruptions and earthquakes. While it is true that natural disasters do affect many countries, the impact on a SIDS economy is relatively much larger in relation to damage per unit area and costs per capita. This was clearly highlighted in our own country Grenada for instance in the aftermath of Hurricane Ivan in 2004.

Environmental vulnerability is further increased by the threats associated with global warming and climate change. SIDS face challenges such as loss of land mass and coastal changes; destruction of crucial ecosystems; and negative impacts on agriculture, fisheries and fresh water sources, to name a few. In the IPCC Third Assessment Report (IPCC 2001), it was concluded that "given their high vulnerability and low adaptive capacity to climate change, communities in small island states have legitimate concerns about their future on the basis of the past observational record and climate model projections."

Social vulnerability as explained by Springer and others (2002) describes the extent to which a shock or stress caused by economic strife, environmental changes, government policies or other internal events can affect the social structure of a community or society. A primary element of this is derived from uncertainty in the domestic job market often due to the prevalence of temporary or contract jobs, which often means income insecurity and no social security.

Factors of social vulnerability, like the factors of environmental vulnerability, are not unique to SIDS. However, the effects tend to have a greater impact because of their economic vulnerability and relatively high population densities.

The idea that SIDS are highly vulnerable is not universally accepted. Some argue that in relation to larger states, many small states tend to have higher productivity levels, lower infant mortality, higher educational attainment and higher life expectancy, which all contribute to greater flexibility and resilience. These ideas however shift the discussion away from the concept of vulnerability towards a debate on whether and how well communities and societies can cope with and adapt to changes. ♦