

# GRENADA COAST-TO-COAST

Coastal EbA Project Bulletin

Issue 3

January, 2015

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

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## Points of Interest:

- \* Following the stakeholder workshop in November 2014, pilot demonstration sites for the project will be Grand Anse, Grenada and Windward, Carriacou.
- \* EbA interventions selected were:
  1. Coral reef restoration
  2. Development of local area management plans
  3. Zonation plan for Grand Anse
- \* Terms of reference published for Coral Reef Specialist to identify suitable coral nursery sites; design nursery; and train staff in coral gardening/farming. Deadline for submission of interest is February 13, 2015.

## CORAL REEFS, THE FORESTS OF THE SEA BY

KERRICIA HOBSON

Throughout the tropical blue waters surrounding Grenada, Carriacou and Petite Martinique, coral reefs – or at least their relics – can be found. These natural assets are, or used to be, a staple around islands such as ours, providing a number of goods and services that support the major sectors of our economies.

### A Biodiversity Hotspot Under the Sea

Coral reefs are the rainforests of the oceans. Although they occupy less than 1% of the marine environment globally, they offer protection and shelter as nurseries and homes to



Photo credit © Andre Joseph Witzig

over one-quarter of all known marine fish, and over tens of thousands of other species! This makes coral reefs THE MOST biodiverse of all marine ecosystems!

The higher levels of variety in the types of plants and animals found in a coral reef ecosystem play a very important role in boosting the overall productivity of the system. It also helps it to better withstand and cope with any impacts affecting it and allows for fairly quick recovery from a host of disasters. Further, it is the immense bio-diversity supported by coral reefs that provides the vast array of economic, environmental and social benefits we earn

### Healthy Reefs Sustain Our Economy

We benefit from many of the goods and services provided by healthy coral reef ecosystems, even though we may not always recognise how intrinsic these naturally-occurring systems are to our economy and livelihoods.

For Grenada, like many of the Caribbean islands, there are three services in particular that are



Photo credit © Andre Joseph Witzig

especially significant.

### Tourism

The foundation of our tourism industry is dependent on, and intimately linked to coral reefs. For instance, have you ever stopped to wonder where the sand that produces our beautiful white-sand beaches, like the world-renown Grand Anse Beach, is supplied from? Well, this sand is mostly provided by coral reefs through various processes.

Coral reefs also provide important contributions to our dive industry. Thriving reefs are full of life and so beautiful to see!  
*(continued on next page)*

## CORAL REEFS, THE FORESTS OF THE SEA (continued from front page)

As such they provide attractions to not just divers, but snorkelers as well.

### Fisheries

Coral reefs are major nurseries and habitats, supporting fish stocks for our fisheries industry such as snapper,

jacks and grunt. Many livelihoods are reliant on the “harvesting” of reef fish for sale, predominantly for the local markets but also externally. Also, the fisheries sector in Grenada is particularly important for much of the population considered as poor and

most in need of some form of subsistence.

### Coastal Protection

Grenada’s assets by and large are most prevalent at or near the coast. Some of these include the Maurice Bishop International Airport and Melville Street Terminal, our main ports of entry; much of the hotels; the town of St. George’s, our business hub along with the wider Grand Anse area; and the Grenada National Stadium, site (and potential site) of major regional and international sporting events. There are also many communities across the country situated right on the coast.

Coral reefs, especially barrier reefs, provide a shield to the coastline against currents and waves associated with storms and hurricanes by reducing the wave energy before it reaches the shore. Reefs therefore act as natural protection for coastal properties, wetlands, ports and harbours against flooding, erosion and flood damage.

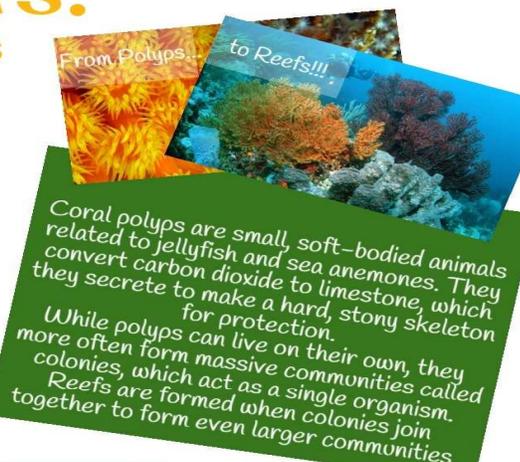
### An Invaluable Asset!

For all the benefits we derive from coral reefs ecosystems, it is clearly an immensely valuable asset to many livelihoods and has broader implications for our economy. Were our reefs to be completely lost, given the accompanying financial losses that will inevitably occur...? Well, that is a reality we should hope to never have to face.

# Coral Reefs: Living Wonders

## Coral Quick Facts

- Less than one-quarter of 1% total sea surface coverage!
- Highest biodiversity of all marine ecosystems!; home to nearly 25% of all marine fish species!
- Structure actually a limestone shell secreted by living organisms called coral polyps.



Coral polyps are small, soft-bodied animals related to jellyfish and sea anemones. They convert carbon dioxide to limestone, which they secrete to make a hard, stony skeleton for protection. While polyps can live on their own, they more often form massive communities called colonies, which act as a single organism. Reefs are formed when colonies join together to form even larger communities.

## Did You Know?

Goods and services from coral reefs support major sectors of our economy.



## WORKING WITH THE STRENGTH OF COMMUNITY— WINDWARD, CARRIACOU BY LEYANA ROMAIN

In December 2014, the project unit held a community consultation in Windward, Carriacou as one of the pilot sites for the project “Building Capacity for Coastal Ecosystem Based Adaptation in Small Island Developing States”. The project was received with open arms and the community welcomed the need for interventions in the area.

While there are a number of issues identified in Windward, including anthropogenic threats to the reef, significant coastal erosion, sea level rise and other issues related to marine resource use, there are opportunities available, through proper reef management, that can reduce vulnerability and build on the community’s strength.

Typically, for natural resource management, users whose activities contribute to degradation are usually displaced in the process. Ideally, there should be some level of compromise where alternative, sustainable income-generating activities are explored. These income generating activities should not exacerbate stress or potentially threaten the resources but encourage protection and sustainable use. In this case, by natural resources in the area, we are mainly referring to coral reefs and mangroves—These ecosystems were identified as ecosystem-based adaptation options for the area as part of this project.

Thus we envision a livelihood component that seeks to exemplify a sustainable way in which communities can gain economic benefits while ensuring that the natural ecosystems they depend on and are harboured by, are protected and managed.

In the Windward community a number of livelihood options are proposed. While there is no ideal set of “sustainable livelihoods” that one can

explore, the dynamics and culture of the community must be considered to examine what can work in the area.

Windward is a small village typically identified with boat building and fishing. For many community members, both forms of livelihood are traditional, meaning that the older generation would pass skills and knowledge to the younger generation through guidance or observation.



Coral Farming, photo credit © Maggie Farrand (2015)

Because of this culture, the community directly and indirectly depend on the natural ecosystems for food, income, protection and general ocean productivity and have a natural connection with the ocean.

Other forms of livelihoods dependent on natural resources, though on a small scale, are selling of corals to tourists; jewellery making; and local businesses centred around tourism, for instance, guest houses and shops.

Livelihood options that are explored should essentially build on the

strengths of the community so as to reduce vulnerability, and focus on the creation of income to reduce poverty. Generally they should seek to enhance the assets in the area and create a better enabling environment through strong government support.

For instance, the project can seek to highlight the tourism potential of the area as a means of creating sustainable livelihoods while building upon existing assets in the community. These assets are the natural resources (coral reefs and mangroves) human capital (high skill set in diving, swimming and boat building) and strong culture and family ties that exists in the community.

Additionally, through our coral reef nursery program, we can involve the spear fishermen in the area to uphold the nursery, (specifically since they are direct users of the reef) and use this ideal opportunity for them to maintain an income and conserve the reef. Other sustainable livelihood options that were proposed are:

- Kite surfing
- Coral nursery tours
- Sea weed farming ( Sargassum)
- Kayaking tours
- Birding tours
- Glass bottom boat tours
- Boat Building School

Together with the community’s aspirations and goals, we hope to further expand on these options and strengthen their capacity to develop sustainable business ideas.

Ms. Romain is the Technical Officer for the Coastal EbA Project, within the Environment Division in the Ministry of Agriculture, Lands, Forestry, Fisheries & the Environment.

# TOWARDS A NEW INTERNATIONAL CLIMATE CHANGE AGREEMENT BY

MARTINA DUNCAN

In 1992, countries established the United Nations Framework Convention on Climate Change (UNFCCC); Grenada became a party in 1994. The convention was established out of the need for parties to cooperatively consider what they could do to limit average global temperature increases and the resulting climate change, and to cope with whatever impacts were, by then, inevitable. Out of this process the Kyoto Protocol was developed and adopted in 1997. The Kyoto Protocol legally binds developed country Parties to emission reduction targets, with the first commitment period from 2008-2012. In Doha in 2012, the Parties agreed to a second commitment period from 2013 to 2020.

In Durban in 2011 the Parties further decided to develop a new international climate change agreement in the form of a protocol—another legal instrument, or an agreed outcome with legal force applicable to all Parties—to be adopted in 2015 and enter into force in 2020. Since then, parties have been negotiating towards delivering this

agreement, under the Ad-Hoc working group on the Durban Platform for enhanced action (ADP).

At the Lima Climate Change Conference in December 2014, Parties to UNFCCC approved the draft elements of the negotiating text: mitigation; adaptation; finance; technological development and transfer; capacity building; and transparency of action and support. The parties were further tasked with intensifying their work towards providing a draft negotiating text by May 2015, and adopting the new agreement in December 2015.

In one of his National addresses in Lima, Hon. Roland Bhola, Minister for Agriculture, Lands, Forestry, Fisheries and the Environment stated that a successful agreement for Grenada must include strong mitigation commitments; provisions for adaptation for vulnerable developing countries; support for developing countries, including the availability and accessibility to sufficient and predictable financing; access to

appropriate technology, as well as access to support for capacity building activities; and transparency of action.

The first negotiation session for 2015 will be held in Geneva, Switzerland from 8-13 February. Parties will have to move towards intense negotiations to ensure that we have a successful agreement that is applicable to all in Paris in December. Grenada and OECS countries negotiate under the umbrella of the Alliance of Small Island States (AOSIS) negotiating group. Many of these countries share similar positions on many of the key issues in the negotiations. Several coordination sessions are held to ensure that the group moves forward in the international negotiations as a united voice.

Going forward in the climate change negotiations, the region will need to push for a strong legally binding agreement that reflects our positions; special national circumstances; and high levels of vulnerability.

For more information on the international climate change negotiations process visit [www.unfccc.int](http://www.unfccc.int).

Ms. Duncan is the Climate Change Focal Point within the Environment Division of the Ministry of Agriculture, Lands, Forestry, Fisheries & the Environment. Special thanks for her contribution to this month's bulletin!

## 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 within the Environment Division of the Ministry of Agriculture, Lands, Forestry, Fisheries & the Environment 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 Office with your input!

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

