

Barbados report on activities related to ICRI

Reporting period July 2012 - October 2013

1. General Information

Are you an ICRI Member?	Yes
Member type (Country / Organization):	Country
Focal Point 1:	
Name:	Angelique Brathwaite
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Focal point 2:	
Name:	Richard Suckoo
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Last meeting attended:	2012 - Australia
Related website(s)	www.coastal.gov.bb

2. **Updates on your activities (**new initiatives/programs/projects of your government /organization which will be of interest to the ICRI Members**).** Examples include MPA declarations, World Heritage sites status, economic valuation of reefs, policy changes in relation to coral reefs etc.

Please see final page

3. Contribution to the ICRI GM

Your responses to the following questions will assist the Secretariat in assessing contributions towards the major themes of the current ICRI action plan and objectives of the general meeting.

a. Community-based monitoring

Are you engaged in, or support community-based monitoring in your marine areas? If so, think about what works and what doesn't with it to be prepared for workshop discussions on this topic. The discussions will revolve around:

- The benefit of community-based monitoring for management and reporting
- Way forward and how countries could support each other through a network of persons involved in monitoring and an online database.

b. Co-management

Do you have co-management arrangements in place for your marine reserves? If so, start thinking about what they are, and what works for you in preparation for workshop and field trip discussions on this topic. There will be some interactive exercises to help guide your thinking and possible way forward.

4. Is there any other topic you would like to raise during the meeting?

 \Box YES \boxtimes NO

If yes, please indicate which topic and the reason why you would like to raise it:

5. Please list relevant publications, reports you have been released since the last meeting.

Title (incl. author and date)	Type of publication (Paper, report etc.)
Report on the Activities of The Coastal Zone Management Unit, January – December, 2012.	Report
Mass Coral Reef Bleaching in the Eastern Caribbean. Angelique Brathwaite, February 28 th , 2012	Report

6. Please indicate upcoming coral reef-related meetings you or your organisation will attend

2nd Global Conference on Land - Ocean Connections (GLOC-2) October 2- 4 2013, Montego Bay, Jamaica	
17th meeting of the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) of the Convention on Biological Diversity (SBSTTA-17), 14-18 October 2013 Montreal, Canada	
2nd Global Marine World Heritage Site Managers Conference, 17-20 October 2013, Corsica, France	
International Marine Protected Areas Congress, 21-27 October, Marseille, France	
9 th Pacific Island Conference on Nature Conservation and Protected Areas, 2-6 December, Suva, Fiji	

Other:

Updates on your activities

Coastal Zone Management Unit (CZMU)

The Government of Barbados (GOB) is presently in its 31st year of ICZM, with the project-based approach identified as a means of garnering the appropriate financial and human resources, as well as establishing and achieving specific milestones.

In the early 1980s, a Coastal Zone Management Unit (CZMU) was seen as integral to the long term effective implementation of ICZM, and this Unit was established. This agency, which is comprised of marine biologists, coastal engineers and coastal planners, was integrated into the Environment Division, with a mandate to develop and implement the Coastal Zone Management Plan for the island nation.

The project demonstrated that multi-disciplinary approaches are effective in coastal management, and also utilised the adoption of pilot project/demonstration projects as a means of utilising coastal engineering and community involvement in coastal management. Institutional strengthening also played a large role, with each project stage involving this element, as well as capacity building in the forms of on the job training and post graduate training of staff.

The Coastal Conservation Programme has resulted in a number of policies, two pieces of legislation, and enhanced work programmes for the GOB. The Coastal Management Plan which outlines all strategies, policies and standards required for the protection of all structures that fall within the management area, is widely utilized by the CZMU as well as other Government and Non-Government organizations. The supporting pieces of legislation, enacted in 1998 are the Coastal Zone Management Act, which deals with physical impacts on marine and coastal resources, and their management, and the Marine Pollution Control Act, which speaks to the control of land-based sources of marine pollution.

Established, routine work programmes for the Coastal Zone Management Unit have been implemented. These fall under the broad categories of Oceanographic Assessments, Coastal Research, Coastal Engineering, Development Control and Education Outreach. Under Oceanographic Assessments, the major programmes include beach profiling, wave climate analysis, water quality assessments, coral reef surveys, and alongshore sediment movement. Additionally, relationships have been strengthened with communities and stakeholders, resulting in their increased participation in coastal management issues.

The Barbados case study can clearly be considered to be a good flagship programme for other SIDS with similar problems. While "piece meal" projects do contribute to the conservation and management process, the integrated approach provides a stronger focus on the problems and creates opportunities for change. The use of integrated coastal zone management programmes places emphasis on implementation of solutions that should reach all groups (from policy makers to technocrats to the general public) who all have interest in the sustainable management of the island's coastal assets. The programme's longevity can be attributed to a number of factors, but include its financial sustainability, the development of a respected, well trained

lead agency, with a specific responsibility to implement ICZM, and high levels of communication between all levels of Government and NGOs.

The Coastal Risk Assessment and Management Programme (CRMP)

The CZMU considers it now prudent to incorporate the elements of risk and disaster reduction, in Integrated Coastal Zone Management, in order to address these challenges. The Government of Barbados requested support from the Inter-American Development Bank (IDB) to finance a Coastal Risk Assessment and Management Program aimed at building resilience to coastal risks through improved conservation and management of the coastal zone, that would consist of the following three inter-related components: Coastal Risk Assessment, Monitoring and Management and Coastal Infrastructure and Institutional Strengthening. The project commenced in 2012 and is expected to end in 2017. A portion of the project is aimed at determining the impact of an ecosystem based approach to risk management. This project will be based on coral reefs.

World Heritage Site

In 2011, Historic Bridgetown and Its Garrison was inscribed on the UNESCO World Heritage List. The site includes Carlisle Bay within its buffer zone, which is a unique historical site and biodiversity hub. A section of Carlisle Bay is already designated as a Natural Heritage Conservation Area. This area is home to six shipwrecks, and patch reefs which are colonized by a variety of flora and fauna. As such, it is heavily utilized as a recreational snorkeling and diving site. Permanent moorings were deployed close to the major wrecks, as well as further away so that boats could secure themselves without damaging any biota. In addition, mooring buoys demarcate the entire Protected/Conservation Area. All these moorings are maintained by the CZMU. The Unit's long-term plan for the area includes attempting to locate historically significant wrecks and paraphernalia from the sunken vessels, such as bottles, which are thought to be located in Carlisle Bay and designating the entire bay and environs as a Marine Protected Area. The entire bay is of historical and cultural importance.

Coral Reef Monitoring

The Unit in collaboration with the University of the West Indies has been monitoring coral reefs at 5 year intervals since 1982. 37 fringing and/or patch reefs and 6 bank reefs are monitored along the south and west coasts of the island. 7 sites on the east coast were recently included in the assessment. This, which has proven to be one of the longest and most consistent coral reef monitoring programmes in the region, has shown a predominant decline in reef health on the bank reefs, but relative stability on the nearshore fringing reefs. Health is determined by the abundance of: coral (to species), *Diadema antillarum*, macroalgae, turf algae, calcareous algae and fish. Coral and fish diversity are also assessed. The most recent monitoring event was carried out in the summer of 2012, and the Unit is awaiting the results of the study.

Future Plans

The Unit plans to embark on a Marine Spatial Planning project during the 2013-2014 financial year. This is seen as a continuation of the coastal zone management plans which have already been developed for the terrestrial zones of the island.

At present, all corals are protected from physical damage by the Coastal Zone Management Act and from land-based sources of pollution by the Marine Pollution Control Act. While both Acts require better enforcement and implementation, it is seen as a positive step that both sets of legislation are in place. With a need to increase the numbers of grazers on especially the nearshore reefs, the Unit is also planning to expand the MPAs that currently exist. This will be done in full consultation with the Fisheries Division and the Fishers themselves.