

Type of TBPA: A cluster of protected areas and the intervening land/sea.



Introduction:

The Mesoamerican Barrier Reef System (MBRS), extending from Isla Contoy on the north of the Yucatan Peninsula to the Bay Islands of Honduras, includes the second longest barrier reef in the world. It is unique in the Western hemisphere due to its length, composition of reef types, and diverse assemblage of corals and related species. The outstanding ecological and cultural significance of the MBRS has resulted in its designation as a World Heritage Site

The MBRS includes more than sixty gazetted Marine Protected Areas (MPAs); however the Project for the Conservation and Sustainable Use of MBRS will focus on the 15 priority MPAs selected for this project. Most of the MPAs selected to receive support under the project are located on, or in proximity to international borders.

- Five MPAs are located in the transboundary area in the Bay of Chetumal (Belize-Mexico): Banco Chinchorro (Mx), Santuario del Manati (Mx), Corozal Bay (Bz), Xcalak (Mx) and Bacalar Chico (Bz)
- Four MPAs are located in the transboundary area in the Gulf of Honduras (Belice-Guatemala-Honduras): Sarstoon-Temash (Bz), Sarstún (Gu), Punta de Manabique (Gu) and Omoa Barracoa (Hn)

The goal of the Mesoamerican Barrier Reef System Project is to enhance protection of the unique and vulnerable marine ecosystems comprising the MBRS, and to assist the countries of Belize, Guatemala, Honduras and Mexico to strengthen and coordinate national policies, regulations, and institutional arrangements for the conservation and sustainable use of this global public good. The Project is part of a long-term program to safeguard the integrity and continued productivity of the MBRS. The MBRS initiative is being actively promoted by a variety of donors and partners in the region and within the context of the Mesoamerican Biological Corridor Program.

Importance to biodiversity:

The MBRS includes a wide range of marine ecosystems and habitats, from oceanic atolls outside the Barrier Reef, to extensive lagoonal and estuarine systems in the nearshore area. These include a variety of coral reef types, seagrass beds, mangroves and other wetlands, which house a rich diversity of flora and fauna, many of them endemic, and some, like



Photos: MBRS Project Archives

the West Indian Manatee (*Trichechus manatus*), the American Saltwater Crocodile (*Crocodylus acutus*), the Nassau Grouper (*Epinephelus striatus*) and Queen Conch (*Strombus gigas*), are seriously threatened as a result of exploitation and, increasingly, habitat destruction.

MPAs are becoming widely used in efforts to protect and manage these resources. MPAs have proved to be a promising means of protecting and enhancing biodiversity and in doing so may yield further economic benefits through tourism and improved fisheries.

Importance to regional economic growth and integration:

The MBRS is also of immense socio-economic significance providing employment and a source of income to an estimated one million people living in adjacent coastal areas. The Project is designed to identify those technical, social and institutional interventions that will enhance the conditions and opportunities for rational use of the resources of the MBRS.

The Project activities will initially focus on the two most significantly important and potentially harmful economic sectors dependent on the

MBRS, fishing and tourism. Many reef fish species play key functional roles in the reef ecosystem. A key stage in the reproductive cycle of several of the commercially important reef-based fish species in the MBRS is the periodic aggregation of spawning populations in geographically-specific areas.

In the Sustainable Coastal and Tourism component of the Project, the objective is to formulate and facilitate the application of policy guidelines and best practice models for sustainable coastal and marine tourism in the four countries of the MBRS. Adoption of industry codes of conduct may then lead to regionally recognized certification schemes for tourist operations and eventually entire destinations within the MBRS.

Importance in promoting a culture of peace and cooperation:

Many of the threats faced by MPAs, sustainable fisheries management and sustainable coastal and marine tourism cannot be resolved through unilateral national efforts. Current issues in need of effective bi- and tri-national management responses include management of migratory fish and wildlife stocks, addressing cross-border infractions of existing laws and the conservation and management of transboundary parks.

The Project supports activities to facilitate meetings for field and supervisory staff of MPA management agencies, tourism operators and fishing cooperatives in the two transboundary areas. It is expected that these meetings, and the resulting dialogue and decisions, will provide the basis for formalizing the process eventually leading to joint co-management of transboundary MPAs.

Two Transboundary Park Commissions were established by the Project to identify specific policy issues that need to be addressed regionally and to make recommendations as to how these issues should be resolved. The topics that the Commissions will discuss relate to MPA management polices, fisheries, migratory fish, mammals and reptiles, tourism and the monitoring of biophysical environmental parameters and socioeconomic aspects.

Main partners:

The partners in the MBRS region are: Belize, Guatemala, Mexico and Honduras, the Central American Commission on Environment (CCAD SICA), the Global Environment Facility (GEF), United Nations Development Programme (UNDP) and The World Bank.

Organization and Main Challenges:

The objectives of the GEF/World Bank supported MBRS Program, agreed to by the four participating countries, are to: (a) strengthen MPAs; (b) develop and implement a regional ecosystem monitoring and information system that will provide a synoptic view of the health of the MBRS and facilitate dissemination of these findings throughout the region; (c) promote measures which will serve to reduce non-sustainable patterns of economic exploitation of MBRS, focusing initially on the fisheries and tourism sectors; (d) increase local and national capacity for environmental management through education, information sharing and training; and (e) strengthen and coordinate national polices, regulations and institutional arrangements for marine ecosystem conservation and sustainable use.

For further information on the initiative please visit the website of the MBRS Project: www.mbrs.org.bz

This case study was written by Oscar Lara of the World Bank.



Photos: MBRS Project Archives