The Mesoamerican Caribbean Reef (MACR) Ecoregion

The Mesoamerican Caribbean Reef (MACR) extends nearly 1000 km from the Bay Islands of Honduras north through Guatemala and Belize to the tip of Mexico’s Yucatan peninsula. It contains the largest barrier coral reef system in the Western Atlantic and is part of a larger interconnected system of coastal habitats and currents that stretch throughout the Caribbean basin and beyond. The MACR is composed of extensive coral reefs including luxuriant patch, fringing, and barrier reefs and unique offshore atolls. A diverse array of fish, invertebrates, birds, plants, sea turtles, and mammals utilize the area. Apart from the productive reef resources, the region also has important coastal habitats such as beaches, coastal rivers/lagoons, mangroves, seagrasses, and coastal wetlands that provide important breeding, nesting, and foraging habitat for numerous species.

The MACR sustains nearly 2 million people from four neighboring countries -- Mexico, Belize, Guatemala, and Honduras -- with a large proportion living along the coasts and islands. Indigenous Garifuna, Miskito, and Pesch communities depend heavily on the reefs for subsistence. These four countries also share several important transboundary drainage systems including the Bay of Chetumal (Mexico and Belize) and the Gulf of Honduras (shared by Belize, Guatemala and Honduras). The rich resources in the region have important ecological, aesthetic, and cultural value to its inhabitants. Productive fishing grounds support valuable commercial and artisanal fisheries. Millions of tourists are attracted to the sandy beaches and teeming reefs providing important economic revenue to the people and their governments.

The MACR is recognized as one of World Wildlife Fund's (WWF) Global 200 - An ecoregion of outstanding biodiversity whose protection is vital for the conservation of the world’s biodiversity. The MACR is also considered a distinct ecoregion, defined as “a characteristic set of communities that share a large majority of their species, dynamics, and environmental conditions, and interact ecologically in ways that are critical for their long-term persistence”.

However, this ecoregion is exposed to a series of threats, which, according to their magnitude and origin, have different levels of impact on the reef system. The four primary threats that are likely to have significant impacts on biodiversity in the ecoregion were identified as follows (Kramer and Kramer, 2002):

1. Coastal habitat degradation or conversion,
2. Declining water quality,
3. Declining or depleted fisheries, and
4. Increased stress due to oceanographic and climato-meteorological phenomena.
The first three threat categories stem mostly from human activities, while the last one may be classified as “natural.” However, over the last few years, it has been possible to establish a more direct relationship between global climate change and coral bleaching, due to the increase in ocean temperature over longer periods of time, which stresses coral. Furthermore, meteorological models forecast an increase in the frequency and intensity of the storms and hurricanes for similar reasons.

**Conservation Initiatives in the MACR**

The importance of the MACR is evident by the number and diversity of parallel and complementary initiatives in the region. The Central American Commission on Environment and Development (CCAD) is heading a project financed by World Bank/GEF to implement the Action Plan for the Conservation and Sustainable Use of the MBRS. Another major program is the Environmental Protection and Maritime Transport Pollution Control of the Gulf of Honduras, promoted by the IDB. Other related projects include the UNDP/GEF Wider Caribbean Initiative on Ship-Generated Wastes and the World Bank Sustainable Coastal Tourism and Management, and currently the development of the Global Transforming Coral Reef Conservation (TCRC) Program, in which TNC, WWF and CI participate.

Long-term financial sustainability for conservation activities in the MACR is a priority. Although several projects are currently being developed in the region, most programs have a time frame of only 3 to 5 years, and lack financial mechanisms to allow continuity of the activities once the projects have been finalized.

Acknowledging the need to secure long-term funding for natural resources management and conservation initiatives in the MACR, four environmental funds from the four countries in the ecoregion, with the endorsement of the Latin American and Caribbean Network of Environmental Funds (RedLAC), and the technical and financial support of WWF and TNC, designed an innovative initiative to attend this issue. The resulting partnership is called the Mesoamerican Reef Fund (MAR Fund), which is a participatory, privately managed mechanism, integrated by Fondo Mexicano para la Conservación de la Naturaleza, PACT Foundation (Belize), Fundación Biósfera (Honduras), and Fundación para la Conservación de los Recursos Naturales y Ambiente en Guatemala (FCG).

Unlike regional existing projects that are often limited by project cycles and established time horizons and restricted to a given country, this initiative is guided by a long-term ecoregional conservation strategic vision that promotes collaboration beyond political boundaries. The mechanism has a 30-50 years planning horizon.

**The Mesoamerican Reef Fund**

In February 2002, the four participating funds signed a letter of intent by which they established an alliance as a complementary initiative to the efforts of other organizations and ongoing projects in the ecoregion. The Mesoamerican Reef Fund will be established as a non-profit, tax-exempt private corporation in the United States. The legal documents have been prepared, revised and are ready to be signed.

The MAR Fund has the following general objectives:

- To provide long-term financial sustainability for natural resources management and conservation initiatives in the MACR ecoregion.
- To strengthen the alliance among the four participating funds, guided by ecoregional conservation priorities.
- To promote coordination among donor and international corporations interested in leveraging their contributions in the MACR, in order to consolidate a significant supply of financial resources directed towards common and strategic objectives in the ecoregion.
The MAR Fund is envisioned as an independent and financially self-sufficient institution that will respond with flexibility and effectiveness to the major ecological challenges facing the Mesoamerican Reef. It will utilize pre-existing technical, administrative, and financial capabilities of the four founding funds as pillars for its operation and will prioritize activities and projects at the national level so that they contribute directly and in a continuous fashion to the conservation objectives of the barrier reef system as a whole.

This Fund will distribute funds based on pre-established and periodically revised priorities, not equally among funds and countries. This will ensure that funding is directed specifically to conservation needs. The priorities shall initially be among those identified in the Ecoregional Vision of the Ecoregional Conservation Planning of the Mesoamerican Caribbean Reef (Kramer and Kramer, 2002), a document developed by a wide range of participants, including local, private, public and international organizations, promoted by WWF.

The initial priorities will include (a) the strengthening of protected areas within the ecoregion, which will encompass infrastructure, management regimes, sustainability of site management, and sustained research and monitoring, and (b) capacity-building for beneficiaries. These initial priorities will be subject to modifications based on participatory periodic reviews with local organizations working in the region, and will be modified as needed in order to reflect the results of other on-going conservation efforts in the Mesoamerican Caribbean Reef ecoregion (the "MACR").

This mechanism will foster coordination with public sector, civil society and private entities regionally and in each one of the countries. The MAR Fund will work in coordination with other initiatives and projects carried out in the MACR, in order to consolidate joint efforts and to promote synergies in financial terms and also with regard to conservation results / impact.

The MAR Fund will not compete with NGOs for already established funding programs involving donors active in the ecoregion. It seeks to raise additional funds and large-scale funding coordinated on a regional basis, which traditionally is unavailable to local NGOs. It also seeks to attract significant contributions from the private sector and businesses which benefit directly from the existence and health of the reef system and its natural resources. By working together with an ecoregional approach, the participating funds will strive to attract financial resources not available to each one individually.

**Short-Term Work Plan for the MAR Fund**

In the short-term, the main objective is to consolidate and strengthen the MAR Fund mechanism to support conservation and sustainable use activities within the MACR ecoregion in the long-term. To attain this, the following intermediate outcomes will be reached:

1. **Hiring of the MAR Fund Director:**
   
   To date, the MAR Fund has been managed collectively by the four participating environmental funds, with technical and financial support from WWF and TNC. However, once the formal legal structure of the mechanism is approved and signed, it will be necessary to hire a MAR Fund Director that will lead and carry out the fund raising, administrative and operative procedures, acting as the hub that coordinates the activities among the four environmental funds.

2. **Implementation of the operating mechanisms and procedures for the MAR Fund:**
   
   The detailed operating mechanisms for the MAR Fund will be implemented by the Executive Director and the participating members. These mechanisms will involve the following:
- Administrative procedures
- Financial procedures
- Project cycle (proposal format, call for proposals, proposal evaluation process and tools, grant agreements, among others)
- Monitoring of selected projects (reporting procedures, reporting routes, field monitoring process, project evaluation)
- Data base structure of approved projects
- Financial and Scientific Committee procedures

The MAR Fund requires a clear structure, in which all members and associates know their responsibilities, in order to be efficient, transparent and successful in its endeavors.

3. Definition of funding priorities and evaluation of the mechanism:

The initial priorities for financial support – of the projects and programs that are to be funded by the MAR Fund- will be capacity building of NGO’s and stakeholders of the region and consolidation of the Protected Areas System of the four countries. These initial priorities will be subject to modifications based on periodic reviews with local organizations working in the region, as well as regional projects, and will be modified as needed in order to reflect the results of other on-going conservation efforts and newly detected needs.

Because local organizations in the region have different degrees of development and experience, it will be important to design and develop a strengthening process that will allow them to carry out conservation and sustainable use activities successfully. The local organizations and National Environmental Funds will be the MAR Fund’s closest associates in the field, and it is very important to make sure that they acquire, when necessary, the capacities to plan, design, carry out, and monitor projects within the Mesoamerican Caribbean Reef.

It will also be very important to develop and implement an evaluation process for the MAR Fund. In order to be a long-term mechanism that can sustainably fund conservation activities in the ecoregion, its performance must be measured and adjusted accordingly.

4. Implementation of a fundraising strategy:

The MAR Fund will leverage already established funding programs involving private foundations in the ecoregion and will coordinate efforts with traditional and new government sources of funding within the Funds’ host countries.

Because the MAR Fund is intended to be a permanent technical and financial support instrument, it is being designed with the necessary flexibility to accommodate different types of accounts. So far, the following have been defined:

- An endowment fund to secure the medium-term financial sustainability of the MAR Fund’s operational costs and its core programs and projects
- Grant funds, by which donors participate in the financing or co-financing of MACR priority projects
- Earmarked funds from donors for specific projects or geographical areas

The various financing mechanisms to be explored are organized into four main categories. The first is the use of economic instruments, associated to market valuation mechanisms. The second refers to private sources of finance, which comprises private investments, funds provided by profit making firms, private independent foundations, corporate foundations, academic institutions, non-governmental organizations and individual persons. The third group includes all public sources of funding, which encompass funds provided by government agencies in developed countries, budget resources from the four host countries, and funds from multilateral development banks and other international organizations. Finally,
combinations of various sources of financing, which usually take the form of partnerships between
government agencies, private firms, foundations, civil society organizations, and international institutions,
will also be explored.

The strategy to be developed will take into consideration the four financing mechanisms that have been
identified. The resulting options will be prioritized and presentations/proposals will be prepared
accordingly. It will be very important to visit the selected potential collaborators directly in order to present
this mechanism, and gain their interest and support. The initial financial goal for the MAR Fund is to
establish an endowment of $5 million by 2006 and $10 million by 2013.

5. Development and implementation of the communication strategy:
The MAR Fund is a regional initiative, and therefore it involves a great variety of stakeholders at many
different levels. It must make a concerted effort to inform about this mechanism in order to maximize
results and impact. A communication strategy will be developed to target the different actors, which can
be roughly grouped in the following manner:

- Potential grantees/beneficiaries
- Potential donors (private, public)
- On-going projects (national, regional)
- National and local governments

The implementation of the strategy will involve printed materials, information workshops, and one-on-one
visits to specific actors, among others.

Current status
At present, the MAR Fund members are carrying out required start-up activities, that include legally
incorporating the Fund, establishing a Board of Directors, developing a detailed case study, fundraising
for the initial stages, and selecting an Executive Director. For these activities, the Fund has the support
of the Summit Foundation.

Coastal habitats are inherently fragile systems, whose rates of decline are noticeable before one’s eyes.
The efforts to stop - or hopefully, reverse - the degradation of the complex habitats in the MACR are
beyond the scope of a single institution or even a single country. Relatively simple issues, such as the
implementation of harvesting seasons for specific marine resources in one country, can result in a
migratory fishing industry that continues harvesting throughout the year, if neighboring countries do not
form part of a regional effort.

From a financial standpoint, a single, centralized regional mechanism such as the one proposed, reduces
the risk of errors in the decision-making and budgeting processes, serving as a more efficient long-term
tool for an effective follow-through of the proposed conservation efforts and their impacts. As a
fundraising mechanism, joining forces for a shared region, will allow us to be more effective, and
therefore more supportive of the financial needs for conservation and sustainable use of resources within
the MACR.

Bibliography