

**Conservation and Sustainable Use of the
Mesoamerican Barrier Reef System
World Bank/GEF/CCAD**

**Mid-Term Review
March 9-21, 2004**

MBRS Mid-Term Review Report

Introduction

Mission Objectives

1. This MTR report presents the findings and recommendations of the Mid-Term Review of the GEF Regional Project: Conservation and Sustainable Use of the Mesoamerican Barrier Reef System (MBRS) P053349. The MTR was conducted in the four participating countries in the project: Belize, Honduras, Guatemala and Mexico from March 9-21, 2004. In addition to this report, an Aide Memoire was prepared summarizing the discussions and key outcomes of the MTR, and recommended follow-up actions by the Project Team, the Central American Commission on Environment and Development (CCAD, the Project Executing Agency), and the World Bank.

2. The main Mission objective were to (i) assess the implementation performance of the Project in relation to key monitoring and evaluation indicators (including those in the Project Log Frame, as well as GEF indicators related to Country Ownership/Drivenness, Public Involvement, Replication Approach, Financial Planning, Cost Effectiveness and Sustainability); (ii) to evaluate Project outcomes and impacts related to assisting the four countries to sustainably manage the transboundary resources of the Mesoamerican Barrier Reef System through capacity building, ecosystem monitoring and harmonized policies governing resource use; and (iii) to identify follow-up actions on the part of the participating countries and the Bank that would enhance the Project's success in the remaining years and justify a follow-on phase.

Mid-Term Review Process¹

3. The MTR was conducted by a World Bank Mission comprised of Ms. Marea Hatzios (Team Leader), Mr. Charles Di Leva (Lead Counsel) and Ms. Leah Bunce (Sociologist). The Mission was joined in Belize by Mr. Noel Jacobs, Regional Coordinator for the Project headquartered in Belize City, and representative of CCAD. The Project was declared effective November 30, 2001, nearly 6 months after approval by the Bank's Board. Thus, it was agreed to delay the Mid-Term Review (MTR) until March 2004.

4. The MTR involved a series of discussions and site visits in the four participating countries: Belize, Guatemala and Honduras and Mexico. Discussions were held with

¹ The Regional Coordination Unit, under the direction of the Project Steering Committee, commissioned an upstream independent assessment of Project status in November, 2003. This review was undertaken by two consultants drawn from the region, Alekcey Chuprine Valladares and Aldo Hernandez Portocarrero, working over a period of two person months. The report was completed in February 2004, however, the Steering Committee voted not to share the results of this evaluation with the Bank's Mid-Term Review Team until after the MTR Mission, so as not to bias the findings of the Team.

key Project stakeholders, including national coordinators and government counterparts in each country, partnering institutions, and key beneficiaries, including representatives from research institutions and NGOs, park managers and fishermen. A list of these individuals and institutions is included as an Annex (1). The site visits to the field were particularly useful to see Project-supported operations first hand and to meet with Project beneficiaries.

5. These interactions afforded the opportunity to assess the Project's major achievements to date, to identify bottlenecks or problem areas requiring follow-up, and to generate new ideas for partnerships and ways to leverage project resources to achieve greater impact. Meetings with the Ministers (or Vice Ministers) of Environment and Tourism and their technical staff in each country allowed for an excellent exchange regarding policies related to management of shared resources (e.g., in fisheries, coastal water quality, tourism and marine protected areas), and progress toward harmonization in each country. Discussions with stakeholders, including technical units and NGOs, academic institutions and coastal communities, led to recommendations for scaling up delivery of project benefits (e.g., to fishermen being trained in alternative livelihoods, or to primary and secondary school teachers trained in new MBRS environmental education guides), and enhancing financial and institutional sustainability. These discussions provided valuable insight on successes, benefits, gaps and weaknesses in project outputs and outcomes to date. The resulting recommendations are presented here for consideration by the Project Management Team, the Project Steering Committee and the Project's many executing partners.

6. The Team would like to thank the Project Coordination Unit for its excellent logistical support in organizing the Mission and facilitating interactions with key project stakeholders. The Team is also grateful to the many people who contributed their time and ideas during the myriad discussions held over the course of 10 days. Their input was invaluable to the Mission's success. Finally, the Team would like to express its thanks to the governments of Belize, Guatemala, Honduras and Mexico for their cooperation and sustained commitment to the joint goals of this regional effort.

Summary Findings

Implementation Performance

7. Based on feedback from stakeholders and the Team's first hand observations and interactions in the field, the Mission concluded that Project Implementation Performance is satisfactory with four of the five components at least 50% complete at mid-term. A review of Project output indicators and achievement relative to benchmarks indicates that the Project is squarely on track with only the Facilitation of Sustainable Coastal and Marine Tourism component behind schedule. Project partners, including UNDP, WWF, TNC and the Belize Coastal Zone Management Authority, commented repeatedly on the many successes of the Project since its launch less than 2 ½ years ago, and the high degree of ownership it has achieved among stakeholders with whom it is directly engaged. This can be directly linked to the substantial investments during project preparation in consultation, representative decision-making, and coordination among the four countries. With a multi-national staff drawn from the four participating countries and both gender and ethnic diversity well represented, the Project Regional Coordination Unit is well vested in the region. Housed in new facilities in Belize City, which also include the Coastal Zone Management Authority and the Belize Fisheries Department, the Project has been able to coordinate effectively with both the Ministry of

Environment (as a member of CCAD) and the Ministry of Agriculture, whose Director of Fisheries serves is the MBRS National Coordinator. The National Barrier Reef Committees (NBRC), which provide input to the Project's annual work plans through representation on the regional Technical Working Groups (comprised of NBRC members according to their technical expertise) have also lent stability, credibility and a high degree of local ownership to this regional initiative.

Key Achievements and Outcomes

8. The Project has achieved significant results leading to outcomes in (at least) three areas: **(1) Capacity Building:** through delivery of a series of training courses and manuals related to: (i) development and launch of a region-wide Synoptic Monitoring Program (SMP) to continuously assess MBR ecosystem health, (ii) MPA Management training (in the design of MPA management master plans and operational plans, as well through use of an MPA Scorecard and other tools to assess MPA management effectiveness of priority project sites in the MBRS as well as throughout Central America; (iii) Fisheries Co-mgt and Alternative Livelihoods to engage fishers actively in managing the fisheries they exploit and to diversify their income base away from fishing; **(2) Knowledge Management:** (i) a web-based Regional Environmental Information System (REIS) to manage the data collected from the SMP and other sources, ensuring quality control and access of regional data by all participating agencies, (ii) a newly revamped project website <http://www.mbrs.org.bz> which contains up-to-date information on all project activities, including a document library also available on CD ROM (over 400 copies distributed to date); and **(3) Environmental Awareness:** Development and mainstreaming of MBRS environmental education material into the official curriculum for primary and secondary schools in all four countries, with training of teachers already underway in Belize, Guatemala, and Mexico, and planned for Honduras.

The MBRS Project has also made some progress in terms of Process indicators related to regional coordination and policy harmonization. There are a growing number of initiatives in the Mesoamerican Barrier Reef region, many fueled by the MBRS Project and the critical mass of resources it has brought to the region. The MBRS Project has taken steps to improve coordination with these initiatives to increase its own effectiveness and to add value to these other efforts, where possible. The establishment of the Project Consultative Group (CG) in October 2003, was a significant step in this direction. The group systematically identified ongoing activities in support of the MBRS Action Plan (an outcome of the Tulum Declaration adopted by CCAD in 2000), overlaps and gaps in coverage and opportunities for joint future investments. It was acknowledged by key actors in the region to be a much needed and valuable initiative. The second meeting of the CG is planned for mid-April 2004, with expanded representation from other key players in the MBRS region. This coordination can also lead to more powerful alliances in support of environmentally sound policies and codes of conduct that affect the MBRS.

Harmonization of policies governing shared resources use among the four countries (Belize, Honduras, Guatemala and Mexico) is proceeding incrementally through adoption of a common policy framework which lays out a set of principles for management of shared fish stocks, biodiversity, water quality, tourism, MPAs and other resources requiring an ecosystem-based approach. With assistance from the Project's Policy Working Group, recommendations emerging from Transboundary Commissions established in the northern and southern Project transboundary areas are being

translated into policies and regulations for review by the four countries. If approved, they will become legally binding instruments governing shared resource use in the MBRS.

Evaluation Based on GEF Project Review Criteria

Implementation Approach

9. The MBRS Project is founded on regional and national coordination and strong stakeholder engagement. The organizational structure, including a MBRS Regional Steering Committee, 7 Technical Working Groups (TWG) and 4 National Barrier Reef Committees (NBRC), provides direct means for stakeholder participation in the Project at the regional and national levels. These Committee and Working Groups provide important mechanisms for discussion of MBRS activities as well as non-Project activities with implications for MBRS objectives. The meetings also serve to improve coordination and information flow about Project activities and to ensure sustained participation by stakeholders (e.g., fishermen and tour operators). A concern raised from the discussions was that the National Barrier Reef Committees are strongest in Belize and Mexico, where they meet as often as monthly; whereas the Guatemala and Honduras National Barrier Reef Committees meet approximately once a year. Another issue of concern was that the Committee members' have an unjust burden of covering their travel expenses, especially as many must also forego a day of work to attend the meetings.

Recommendations:

- *The National Barrier Reef Committees in Honduras and Guatemala to establish more effective means of coordination and discussion, including consideration of more frequent meetings to ensure active participation of members and discussion of MBRS and related activities.*
- *MBRS Project to support travel and lodging costs for members who must travel.*

10. The Committees and Working Groups provide unique mechanisms for collaboration not only related to MBRS, but also for partnerships on other activities of mutual interest in the region. In discussions with the Bay Island Conservation Association (BICA) in Honduras, the coordinator noted that the organization now has much closer relations with the municipal government now that they are working together on the MBRS Synoptic Monitoring. In the cases of both Honduras and Guatemala, the National Barrier Reef Committees provide the first national-level mechanism for coordination on coastal/marine-related issues. For example, the Belize National Steering Committee is an important forum for discussion of the Belize Tourism Board's recently drafted Cruise Ship Policy, which will soon go to Cabinet for consideration. However, a concern identified from the discussions is that the National Barrier Reef Committees, which were established to represent a wide array of interests in the coastal zone, tend to focus only on MBRS Project specific activities, whereas there are many other related issues and initiatives with potential bearing on the MBRS, which also need to be addressed. A suggestion was to increase communication outside of the designated meetings, as often issues arise that need immediate attention, discussion over time and/or may not involve all of the members. Such discussions can occur informally through one-on-one conversations or through broader e-mail communication.

Recommendations:

- *National Barrier Reef Committees and TWGs to look at areas of collaboration outside MBRS planned activities. For example, a formal review of the BTB Cruise Ship Policy before it is presented to Cabinet for approval.*
- *Committee and Work Group members to keep other members informed of relevant non-Project activities to ensure multi-stakeholder participation in issues of concern to MBRS.*
- *The Technical Working Groups to nominate chairs from within their ranks, replacing Project Staff who currently carry out this task, to institutionalize this function and to encourage communication among TWG members outside the MBRS specified meetings on a wider range of issues which may relate to the MBRS.*

11. The complexity and scope of economic development activities emerging within the MBRS region and externalities related to trade, tourism and other policies, emphasize the need for broader consultation with political players outside the current cast of MBRS partners. A larger policy and stakeholder group will need to be engaged by the MBRS Project and the National Coordinators and their host ministries. The latter, primarily environmental institutions can play a greater coordination role at the national level, liaising with ministries of Tourism, Agriculture and Fisheries, Water and Sanitation, and Maritime (Coast Guard) Authorities. Opportunities for such multi-sectoral planning and policy harmonization are emerging within the four countries, e.g., in Guatemala with a newly formed roundtable for environmental policy sponsored by the Ministry of Environment and Natural Resources to bring together representatives from key productive sectors to bring policies in alignment with sustainable uses and to minimize their impact on the environment; and in Mexico with the establishment under the Bank-financed Sectoral Adjustment Loan to the Ministry of Environment (SEMARNAT), of various sectoral working groups, comprised of key representatives of the industry along with members of SEMARNAT, to mainstream environmental sustainability principles into Industry practice. The MBRS Project should engage with these groups to ensure that the objectives enshrined under the Tulum Declaration adopted by the heads of state of the four countries to conserve and sustainably manage the MBRS—are not undermined by short-term sectoral interests or mis-aligned policies with adverse impacts on ecosystem goods and services of the MBRS. At the regional level, CCAD also has an important role to play by elevating concerns about the future health and productivity of the MBRS as a regional public good to counterparts in SICA in concerned ministries such as Tourism, Fisheries, Forestry, Water, Public Health and Infrastructure. Alignment of regional economic development and trade plans now under review by SICA members with the sustainability principles outlined in the Mesoamerican Biological Corridor (MBC) Business Plan adopted by CCAD and partners at the Paris Conference in December 2002, should be a high priority for CCAD. The joint Agriculture and Environment regional plan, recently adopted by CCAD and the Consejo de Ministros de Agricultura, may serve as a model.

Recommendations:

- *MBRS to forge closer links to political decision-making bodies through the National Coordinators and other project stakeholders. For example, the MBRS National Coordinator in Mexico (head of the National Commission of Protected Areas within SEMARNAT) could be invited to joint the Working Group on Tourism in Mexico, to bring concerns about the rapid pace of tourism development along the fragile Riviera Maya to the attention of decision-makers);*

in Guatemala, the Bank could try to assist the Ministry of Environment to get an Institutional Development Facility (IDF) grant to help establish the Policy Roundtable, its modus operandi and the basis for its sustainability; in Honduras, SERNA's commitment to working closer with the Ministry of Tourism at the technical level and the policy level should be supported and expanded to include other ministries, including Education, Agriculture (COHDEFOR and DIGEPESCA in Protected Areas and Fisheries, respectively), and Local Government on issues related to the sustainability of the MBRS and its contribution to social and economic development in the region.

- *MBRS Project to move forward quickly on plans to prepare an economic valuation of MBRS resources and economic development scenarios with implications for the sustainability and continued productivity of the MBRS.*

12. Given the strength of evidence that adverse impacts on the reef from a range of development activities are continuing, it is important that the MBRS Project carefully target where its response to this impact is likely to be most cost-effective, in light of the limited resources to address these issues relative to their severity.

13. The MBRS Project has recognized the need for coordination with other projects in the region. Better networking between the MBRS and other projects, such as the UNDP/GEF Belize Barrier Reef Project (about to end), ICRAN, PROARCA, WWF, WCS, PACT, is being promoted through the establishment of a Consultative Group of key partners in the region. The group met in Belize in October 2003, with a second meeting planned in Mexico in mid-April. This networking will consolidate efforts on the ground to deliver benefits to target groups and fill in gaps in areas identified in the MBRS Action Plan adopted in 2000 by the Council of Ministers of CCAD. These coordination efforts should dispel any concerns voiced among some partner organizations that MBRS activities tend to be insular. While there was a request for greater communication, transparency and flow of information regarding MBRS activities to other stakeholders, the MBRS Project has been exceptional in posting project information on its website (including Auditor's Reports and Approved Annual Workplans) and recently distributed over 400 CDs of its document library to interested parties. The PCU will also provide institutional support to the ICRAN MAR Project coordinator by hosting office space and providing day to day supervision of the coordinator.

Recommendation:

- *PCU to continue to strengthen reciprocal efforts at coordination of activities, resource sharing, and communication with partners and other stakeholder groups through the Consultative Group. PCU to add new indicator: Development of two regional activities in collaboration with other MesoAmerica Barrier Reef players (e.g. WWF, TNC, Summit Foundation) such that resources, capacity and skills are drawn from all partners to strengthen the activities.*

14. Critical to stakeholder engagement is an understanding of who the stakeholders are, their priority interests and their perceptions of coastal resources and management efforts. The importance of understanding socioeconomic aspects of marine conservation was noted throughout the discussions. The Belize Protected Area Conservation Trust, for example, noted that incorporating socioeconomics into their plans was a requirement for their establishment. Many sites have conducted, or are planning to conduct, socioeconomic monitoring for their area, yet these efforts are not coordinated or comparable. If a socioeconomic survey was agreed region-wide, then

the results could be comparable over time and between sites. Coordination would also avoid the risk of communities being interviewed multiple times resulting in interview fatigue and reduced trust in the management authorities. The socioeconomic study could also be an opportunity to address the key issue of alternative livelihood opportunities in the region.

Recommendations:

- *PCU Sociologist to work with partners to conduct socioeconomic studies (one for each country) of coastal communities with emphasis on alternative livelihood opportunities (see discussion below regarding alternative livelihoods). PCU to coordinate national-level workshops among social scientists and coastal managers to agree on the objectives of the socioeconomic study (e.g. assess national as well as site-level influences, alternative livelihood opportunities, resource values, community dependency on resources, and/or impacts of coastal management on local communities, etc.). During the workshop the group needs to determine what has already been collected, where and what needs to be collected. Based on this gap analysis the group can then determine the most appropriate approach to address the gaps.*
- *PCU to add new indicator under “Increased knowledge and dissemination of information” objective to track the establishment of socioeconomic monitoring programs in each country. New Indicator: National socioeconomic monitoring programs established in each country as complement to biophysical synoptic monitoring.*
- *Based on outcomes of the socioeconomic studies, PCU to jointly hire (with other partners) an extension agent/ outreach/ sociologist for each country to complement work of the MBRS staff sociologist, to coordinate each country’s socioeconomic assessment, to liaison with communities regarding MesoAmerica conservation initiatives (MBRS, MesoAmerica Reef Alliance & TNC MesoAmerican Initiative); and to develop partnerships specifically with stakeholder groups (e.g. MesoAmerica Reef Regional Fishermen’s Congress). World Bank Sociologist and MBRS Sociologist to develop TOR with partners. The responsibilities/tasks of the sociologists will depend in part on the outcomes of the socioeconomic studies.*

15. During the Review it also became clear that there are a number of relevant initiatives supported by IFC, the Inter-American Development Bank and others which need to be monitored to ensure that these are consistent with MBRS Objectives or to promote synergies.

Recommendations:

- *World Bank to inquire about IFC aquaculture investments in Belize. Of particular concern are reports of effluent and nutrient enrichment in shrimp ponds in the area north of Port Honduras. The ponds also need to be monitored over the long-term, the results of which would be useful to include in the REIS.*
- *World Bank Task Manager to follow up with the IDB on the status of the IDB/GEF Marine Pollution Control Project (e.g., progress on plans for port waste reception facilities, cruise ship tourism impact and carrying capacity studies).*

16. Policy coordination and harmonization among the 4 countries is also a priority aspect of the MBRS Project. Progress continues on the formulation and harmonization

of a regulatory framework for the use of shared resources and coastal governance within the MBRS region; however, supervision and follow up by the National Coordinators and the CCAD Executive Secretariat will be required to take this agenda to the next level. A Sustainable Development Policy Framework for Fisheries Resources, Tourism, Water Quality and Transboundary Marine Protected Areas has been drafted with the objective of trying to harmonize policies and environmental management systems in the region, promoting common positions which reflect principles already agreed to under international conventions and instruments, such as the Convention on Biodiversity, the Cartagena Convention, the FAO Code of Conduct for Straddling and Migratory Fish Stocks, etc. This common framework was adopted by CCAD member states in the Gulf of Honduras (Belize, Guatemala and Honduras), and is currently being considered for adoption by Mexico.

Recommendations:

- *CCAD to follow through with plans to harmonize legal and policy frameworks among four countries governing shared resource use within the MBRS, and engage members to promulgate appropriate regulations at national and local levels to implement the adopted framework.*
- *National Coordinators, PCU and CCAD Executive Secretariat to pursue 4 country adoption of the Sustainable Development Policy Framework for Fisheries Resources, Tourism, Water Quality and Transboundary Marine Protected Areas (The Policy Framework has already been adopted by Belize, Honduras and Guatemala through CCAD). Regarding Mexico, it was agreed that SEMARNAT (the Ministry of Environment and Natural Resources) will organize a legal review of the proposed framework with the participation of concerned ministries, and provide an opinion on its adoption as soon as possible. Also agreed during the mission, the Regional Coordinator will use the good offices of the Mexican Ambassador to Belize to facilitate a timely decision. No further meetings of the transboundary commission between Mexico and Belize, whose mission is to achieve greater harmonization of policies and regulatory frameworks at the national level, will be convened until a decision is made by Mexico whether or not it will adopt the framework policies.*
- *National Coordinators and PCU to pursue agenda for trans-boundary cooperation in Gulf of Honduras by pursuing joint regional fisheries management and enforcement. Collaboration may involve joint naval operations involving Sapodilla Cayes and a permanent presence on Nicholas Caye.*
- *National Coordinators and PCU to work with the Bank's Resident Mission in Mexico to pursue agenda for transboundary cooperation at Mexico/Belize border via the transboundary Policy Framework for shared fisheries management, which includes tourism, fisheries, water quality and other sectoral policy harmonization. Will include legal advisors of other ministries to engage in the work of the Transboundary Commissions.*
- *The Transboundary Commission for the Gulf of Honduras, with support from TRIGOH, will meet to begin drafting regulations to operationalize framework policies on tourism, fisheries, MPA enforcement and water quality at the national level.*

Country Ownership/Driveness

17. At the same time that the countries have made progress toward a shared policy framework, they recognize that they need to constantly review and where necessary

amend existing national legal framework or promulgate new legal measures. They recognize that there is shifting illegal use along the reef and that each government should seek to help the others to combat this illegal activity. As a result, each of the countries is considering certain national measures for adoption. To provide cost efficiency to these actions, the MBRS can develop template or model laws or regulations that can be considered by each of the governments and tailored to their needs. As an example, several of the countries have weak specific legislation pertaining to national marine protected areas, but all were interested in being sure that their laws and regulations were up to date.

18. Having noted their national policy and legal initiatives, all governments agree that where there are issues in common, they should seek to identify where they can harmonize their approaches. Thus, the governments agreed that migratory species should be the beneficiaries of harmonized regulations, and that governments should begin to discuss how they might assist each other in carrying out enforcement of such harmonized regulations, while respecting the national sovereignty of each country. A similar approach can be anticipated for mitigating tourism impacts, and maintaining agreed minimum standards of water quality for various uses (e.g., bathing, fisheries habitat, conservation, mariculture/aquaculture. In all such areas, there may be economic and policy incentives to harmonize along the MBRS.

19. Country ownership may also be furthered by developing financial instruments such as trust funds that can cover sustainability issues. (See discussion on financial issues below).

Recommendation:

- *World Bank Legal Counsel to work with PCU to assist Policy Working Group on regional policy harmonization. Counsel and PCU to identify specific aspects of the MBRS where there are benefits to harmonize. Where such aspects are specifically identified, provide resources to develop legal instruments that can support the four countries at both the regional and national levels to adopt such instruments. Provide alternatives to be considered depending upon at what level the decision is made to pursue such matter. For example, if there is need to develop MPA regulations, MBRS can develop model that can be circulated among the national committees for further submission to government.*

Public Involvement

20. As noted under *Implementation Approach*, the MBRS organizational structure includes a Regional Steering Committee, 7 Technical Working Groups and 4 National Committees. These entities provides means for direct stakeholder participation in the Project at the regional and national levels. In contrast, the engagement of site-based stakeholders in Project *coordination* is more limited. Community members in marine protected areas, including fishermen and tourism operators, can participate in management decisions through their representatives to the MPA Local Advisory Committees. More broadly they participate in training workshops and receive awareness information. However, there appears to be limited involvement of coastal, community-based organizations in MBRS planning and execution, including determining training needs. There is a need for the Project to have more direct interaction with

community-based organizations to enable them to benefit from, participate in, and provide feedback regarding Project activities.

Recommendations:

- *MBRS Steering Committee and PCU to explore opportunities and mechanisms to more directly engage coastal, community-based organizations in Project planning and execution.*
- *As discussed above in Implementation Approach, PCU to jointly hire (with other partners) an extension agent/ outreach/ sociologist for each country. Extension agent will serve key role as liaison with communities regarding MesoAmerica conservation initiatives (MBRS, MesoAmerica Reef Alliance & TNC MesoAmerican Initiative) and will develop partnerships specifically with stakeholder groups (e.g. MesoAmerica Reef Regional Fishermen's Congress, activities specific to local dive operators). The responsibilities/tasks of the sociologists will depend in part on the outcomes of the socioeconomic studies.*
- *During development of Phase 2, World Bank will incorporate a coastal management component. This component will be designed to engage and build capacity at the municipal level (e.g. mayor's office and community-based organizations).*
- *PCU to add following new indicators related to the community outreach positions (relevant objectives noted in parentheses): 1) increased community-level information sharing regarding MesoAmerica Barrier Reef programs, including the MBRS Project, the International Coral Reef Action Network (ICRAN) MesoAmerica Reef Alliance, the TNC MesoAmerica Initiative, the IDB Bay Islands Natural Resource Management Project and other donor activities (Public Awareness); 2) establishment of partnership activities specifically with user groups whose activities may be threatening the reefs, such as fishers, tour operators and hotel developers, to mitigate these threats (Increased Opportunities for Sustainable Use); 3) community outreach sociologist providing additional mechanism for stakeholder input to the MBRS Project by providing feedback to the MBRS Project in order to enable local stakeholder ideas and concerns to feed into planning and execution and, as a result, interests are heard in the PCU, the National Barrier Reef Committees, the MBRS Steering Committee and Technical Working Groups and by other relevant partners (Increased Public Awareness); 4) objectives and operation of the National Barrier Reef Committees strengthened to serve as platforms for interest groups to be represented (Increased Public Awareness); and, 5) MBRS awareness of local activities relevant to MBR program goals increased in order to help ensure MBR programs are responsive to the local situation and needs (Increased Public Awareness).*

21. Although community-based organizations' participation in Project coordination is limited, the Project activities are benefiting coastal management programs. For example, the national fisheries co-management workshops are designed to develop site managers' and fishers' capacity to address co-management issues and to adopt sustainable use patterns. Similarly, the bi-lateral fishers exchanges (e.g., between Mexico and Belize) directly benefit those sites by sharing good practices. PCU is working directly with site-based organizations to implement these activities. For

example, the Toledo Institute of Development and Environment in Punta Gorda, Belize is contracted to organize the alternative livelihood training in southern Belize.

22. There was, however, interest in having an even stronger emphasis on bringing resources (e.g. guidebooks, training) to the coastal management sites. There were also several identified opportunities for stronger partnerships directly with the stakeholder groups (e.g. Regional Fisheries Congress, environmental training for dive operators). There were also several comments on the need to have even more activities at the site level, particularly to bring the training to the sites. The Belize Ministry of Education in particular asked for support for train the trainers on the education curricula.

Recommendations:

- *PCU to improve flow of information, resource sharing, and two-way communication with national and site-level partners and stakeholder organizations.*
- *MBRS PCU staff to establish communication between the National Coordinators, counterparts in the Ministry of Education and the MBRS PCU staff in charge of education and outreach to accelerate the training of teachers in the new curriculum and optimize the number of classrooms and children in each country exposed to information about the value and importance of the MBRS.*
- *MBRS to ensure greater outreach and dissemination of knowledge products (e.g. synoptic monitoring guidelines, management effectiveness guidelines, etc.) with site-based partners.*
- *PCU to develop MBRS Radio shows for kids, which may include a quiz question of the week (scale up TIDE model) and may involve videos for distance learning (tele-secondaria in Belize).*

23. Another concern voiced was determining how the project's environmental messages are influencing people's attitudes and behavior.

Recommendation:

- *PCU to develop a new indicator for environmental awareness that measures changes in attitude as well as in human behavior (process indicator) as a result of environmental education campaigns in formal and informal education center. This indicator could be evaluated based on surveys at different intervals over the course of the Project.*

24. Participation of the indigenous communities is an important issue to MBRS so much so that an Indigenous Peoples Development Matrix was developed to monitor and ensure that ethnic groups were adequately involved in the project. The PCU is currently working with 43 indigenous organizations in the region, which represent approximately 960 people. A more regular monitoring and reporting system on the progress of implementation of this plan is indicated.

Replication Approach

25. The MBRS Project has been successful in providing tools and training that have been adopted by partner organizations throughout the region. For example, in February a joint MBRS/PROARCA MPA management effectiveness indicators workshop was held with participants of not only the 4 MBRS countries, but also managers from El

Salvador, Costa Rica, Nicaragua and Panama. Together the participants developed indicators that will be used not only by MBRS but the neighboring nations as well illustrating the region-wide influence that the Project is having in terms of standardizing and scaling up data collection for management decision-making. The training of trainers workshops enable participants to adopt the tools to their own needs and conduct training with their colleagues. The Belize Department of Agriculture noted that fisheries cooperatives are now conducting their own co-management training as follow-up to the training they received from MBRS. Similarly teachers in Belize have asked for assistance to conduct their own localized training using the education materials.

26. More broadly the MBRS Project has brought the region's coral reef conservation issues to global attention and has succeeded in implementing a number of much-needed interventions. This success has helped leverage additional investments from Oak Foundation, Summit Foundation, U.S. Agency for International Development, and the United Nations Foundation. As a result, these groups and partners in the International Coral Reef Action Network (ICRAN), including CORAL, The Nature Conservancy, World Wide Fund for Nature and UNEP, have developed their own MesoAmerican Reef Initiative to complement MBRS activities and help take some of them to scale.

Recommendation

- *MBRS Project to liaise closely with MAR initiative and other investors in the region to consolidate and replicate alternative livelihood training to fishers (e.g., in sustainable tourism in and around MPAs; reef ranching of coral reef species, etc.), undertake social and environmental carrying capacity studies for cruise ship tourism, and refine and replicate hydrodynamic modeling from ridge to reef to assess land based impacts on MBRS ecosystem health.*

Financial Planning

27. Despite a nearly 6 month delay in Project effectiveness, disbursements are nearly at the mid-way point, with approximately 44% of the funds disbursed. UNDP/EI Salvador, serving as the Project's Financial Management and Procurement agent, has initiated electronic disbursement, which will accelerate disbursements from the Project's Special Account and further streamline flow of funds.

Cost-effectiveness

28. As indicated above, the MBRS Project has been exceptionally successful in leveraging new sources of funding and consolidating action around key themes among various old and new partners in the region. The GEF investment has been catalytic in this respect and the funds allocated to various Project activities have been spent effectively in terms of outputs and potential impacts (the latter remain to be measured, as the project matures).

Sustainability - Financial & Institutional

29. The MBRS Project was specifically designed to build long-term institutional capacity after the completion of the Project. The MBRS PCU provides the coordinating role, but does not execute activities; instead, the PCU depends on partner institutions within government, NGOs or the research community, to execute activities, thereby providing a foundation for post-Project sustainability. MBRS has established a strong foundation for institutional stability by involving a wide variety of players in overall project planning and implementation (e.g. annual work plans are reviewed each year by the Technical Working Groups, which are drawn from the National Barrier Reef

Committees). The synoptic monitoring component involves research institutions, government agencies and NGOs; the MPA management component involves Ministries, fishers, and NGOs; and the co-management arrangements engage fishers, municipalities, and national governments. This diversification has been critical to dispersing burden and risk. However, the long-term commitment of these partners is not ensured given the uncertainties of public sector budget allocations. Steps, therefore, need to be taken to ensure that efforts to mainstream Project activities into the institutional mandate of existing organizations at the national and regional level are reinforced by strategies for financial sustainability (see paragraph 30 below).

Recommendations:

- *Government counterparts and Consultative Group should consider developing a Sustainability Plan for investments, capacity building, MPA management, etc. in the region.*
- *Relatedly, government counterparts and the MBRS Consultative Group may wish to develop an Action Plan, owned by all partners, to address continued support for beyond the life of the Project. As part of these discussions, MBRS Steering Committee with PCU need to assess the future structure of the Project and determine the commitment levels of the relevant partners. Technical Working Groups could be charged with coming up with sustainability plans for each project activity and National Barrier Reef Committees might also consider the question of personnel and resources required to sustain the involvement of each country in regional activities.*
- *The Steering Committee to address the sustainability of the PCU as a CCAD Regional Center of Excellence for Coastal and Marine Resources Management. Attention needs to be paid to the location of the PCU to ensure future leadership in this initiative. Consideration also needs to be given to prospects for maintaining this Center in the absence of a Phase 2 Project.*
- *For each country the sectors (represented on the national committee) need to identify areas of synergy for future coordination related to the Mesoamerican Barrier Reef System (e.g. in Honduras = MBRS, Bay Islands Honduras, IHT, IDB) for inclusion in follow-on activities.*

30. Regarding financial sustainability, it is important to consider diverse sources of financing to cover costs of maintaining activities beyond the life of the Project,. Possible funding sources for MBRS to explore include: user fees, trust funds (e.g. MAR, PACT endowment), grants, green taxes (e.g. 1% environment tax in Belize on purchases), pollution fees and private sector contributions (into specific activity, trust fund, grants). Discussions with the Belize Protected Areas Conservation Trust and WWF in Belize, identified efforts to develop a regional fund for the Meso-American Reef (MAR Fund), to help sustain activities and benefits after Project funding ends. The MAR Fund would draw upon a network of national level Trust Funds in each country (Protected Areas Conservation Trust (PACT) in Belize, Fondo Mexicano para la Conservacion de la Naturaleza in Mexico, Fundacion Biosfera in Honduras and Fundacion para la Conservacion de Recursos Naturales y Ambiente in Guatemala), capitalized by user fees (e.g., from the Cruise Ship Industry), tourism taxes, environmental taxes, corporate contributions and grant funds. In addition to Trust Funds, the Project partners have agreed to explore scholarships to support student involvement in monitoring efforts. Better networking between projects in the region can also result in cross subsidies and

synergies which can help sustain individual initiatives long after external funding disappears.

Recommendations:

- *MBRS Regional Coordinator to develop a plan for approaching the private sector to help set up an endowment for the coastal and marine resources conservation and management in the MBRS region.*
- *MBRS PCU and MBRS Steering Committee to evaluate long-term financial sustainability options, including those noted above.*
- *PCU to develop scholarship program for graduate students to conduct research at MBRS sites as part of the students' training.*

Monitoring & Evaluation

31. The MBRS Project has a log framework to direct the long-term project plans with specific outputs. Project Status Reports are conducted every 6 months to ensure the project is on track and to address problems as they arise. Following is the evaluation of the status of the project components: (See updated log frame indicators, attached as Annex 2.).

Evaluation Based on Project Component Indicators

32. The project has performed very well in achieving the indicators with four of the five components at least 50% complete (see Annex 2).

Marine Protected Areas

33. Six of the seven MPA sub-components are at least 50% complete. As part of the *Planning, Management and Monitoring* activities, the data baseline and monitoring program has been designed, public consultations have been held to develop management plans in two of the four MPAs, support has been provided for development of the management plan for OMOA, 86 people have been trained in MPA management, and the Transboundary Commission and Policy Working Group meetings have been held to address transboundary policies. As part of the *Institutional Strengthening* activities, equipment has been provided to MPAs in Belize, Guatemala and Mexico and multi-purpose visitor centers have been built in two MPAs.

Regional Environmental Monitoring and Information System

34. The REIS sub-components range in completion from 10% to 100% complete. The web-based REIS has been designed, installed and is functioning. The Synoptic Monitoring Manual is complete, 30 persons have been trained in its use, the first set of data was collected during the training, and monitoring equipment has been delivered to Belize, Guatemala and Mexico.

Promotion of Sustainable Use of MBRS

35. This component is the least complete. The *Promoting Sustainable Fisheries Management* activities are on schedule with the completion of the technical document of Spawning Aggregation Sites, monitoring protocols and one regional training workshop. In addition, 377 people have been training in fisheries co-management at the regional and national levels, which is over twice the target amount. The *Facilitation of Sustainable Coastal and Marine Tourism* activities are behind schedule with only 1 of the 5 sub-components 50% complete; however a Sustainable Tourism expert has been hired to

address this gap. A Best Practices Manual is being published; Codes of Conduct are being considered instead of certification; the marine tourism study tour is planned in coordination with the Best Practices Manual; and two tourism fora have been held in lieu of training.

Public Awareness and Environmental Education

36. This component is the most complete with indicators reported as 100%, 70% and 100% complete. The Environmental Awareness Campaign strategy has been completed and is under implementation. In addition 80 teachers and 13 journalists have been trained in environmental and MBRS concepts and more than 10,000 posters, folders, stickers, rulers and brochures have been distributed in the region. Furthermore, over one third of the participants have been indigenous and over one third have been women, which is in line with the Indigenous Peoples Development Plan, which promotes participation of indigenous people and women as much as possible.

Regional Coordination and Project Management

37. All except one of the sub-components are 50% or more complete. All of the committees and working groups have been established and are operational, efforts are underway to conduct the economic development scenarios in the region, and the Transboundary Commissions are pursuing a subset of policies in areas of shared MBRS resource management. With regards to CCAD, multi-sectoral meetings have been coordinated by CCAD and regional environmental concerns have been reflected in PARCA and CCAD Annual Work Plans.

Major Issues Raised During MTR

39. In addition to the issues related to the GEF Evaluation Criteria, the MTR Team noted a number of issues specific to the MBRS Project, which are discussed below.

Alternative Livelihood Program

40. Alternative livelihood training will begin in the second half of the MBRS Project. It is worth noting that the training that has been conducted by other organizations was noted as highly successful. In Punta Gorda between 20% to 50% of the trained fishers were noted to have switched into tourism. Now people are asking for training and it is influencing their conservation ethic. One of the local Punta Gorda conservation organizations noted that fishermen have actually asked for quotas and moratorium on fishing in certain areas.

41. One of the recurring issues during the meetings was the need to comprehensively address how to deliver on the goal of alternative livelihoods, beyond providing training. As the TIDE Director noted, there must be follow-up to ensure equipment is available and to address any infrastructure, capital investment, or marketing limitations. Community members indicated that they already have enough trained tour operators and instead need loans for equipment, internet access to markets, and small business training in such topics as accounting and bookkeeping.

Recommendations:

- *In the development and implementation of the MBRS alternative livelihood component, PCU and national coordinators to first ensure an understanding of*

previous alternative livelihood projects in the area. The results and lessons learned from these previous projects need to provide the basis for future MBRS activities. Discussions with the community groups will be critical for determining how the MBRS livelihood activities can build upon the previous livelihood activities. For example, in Punta Gorda discussions indicated that instead of more training, focus may need to be on developing a revolving fund and providing small business training.

- *As discussed above, PCU Sociologist to work with partners (e.g., WWF, TNC and USAID/Proarca) to conduct socioeconomic studies (one for each country) of coastal communities with emphasis on alternative livelihood opportunities. Alternative livelihood study may involve market evaluation to consider value added potential for investments in alternative livelihoods for fishers (e.g., small business incubation and training). Study to be conducted to consider site, national and regional-level influences. For Belize, consult Belize Tourist Board Statistics on what tourist activities people engaged in, where and plans for the future. In Honduras, Guatemala and Mexico, need to do more ground work, especially in association with MPAs. Also look at non-tourism alternatives, such as aquaculture (reef fish ornamentals, coral farming, mangrove oysters, etc.) (see World Fish Center – Johann Bell).*
- *PCU to explore revolving fund for fishermen trained in alternative livelihoods. Explore funding possibilities with WWF, USAID, TNC or MBRS Project. Discuss at Consultative Group Meetings in April.*
- *PCU to add new indicator to track number of fishermen trained who actually reduce their effort and switch to tourism (50%). Better reporting is required as well (base line surveys and tracking systems need to be in place). Belize Fisheries Department needs to work with TIDE and Fishing Cooperatives (and other training efforts). New Indicator: 35% of fishermen trained in alternative livelihoods derive at least 50% of their income from an alternative, assuming there is a market for this kind of tourism.*
- *PCU to discuss with partners need to ensure alternative livelihoods are alternative not supplemental by establishing permanent limitations on new entries to fishing.*

Co-Management & Site Exchanges

42. Two of the most successful activities noted in the region were the fisheries co-management workshop and the site exchanges between fishermen. During the exchange from Punta Allen, Mexico, to Placencia, Belize, the fishers discussed their respective fishing and management regimes. As a result of these discussions the Placencia fishers are now placing fishing limits on the lobster fishery similar to those in place in Punta Allen. The Punta Allen gained a greater appreciation for their relationships with the park managers and relatively fewer conflicts and management problems. Similarly, as a result of the fishermen exchange from Cayos Cachinos, Honduras, to Banco Chincorro, Mexico, the Honduran fishers decided to prohibit use of SCUBA for lobster fishing. The fisheries co-management workshop in Honduras, which brought together fishers from Cayos Cachinos and OMOA, resulted in the OMOA fishers deciding to ban coral extraction for jewelry. Similarly the Guatemalan fisheries co-management workshop, which involved 56 fishers, resulted in the fishers meeting with Fisheries Department officials to discuss stronger regulations and enforcement. Finally, the President of the Fishermen's Association for Quintana Roo, has proposed a Fishermen's Congress for the region, which would bring together fishers from throughout

the MBRS region to discuss these issues. His impetus for such a congress was his experience in exchanges with Belize fishers.

Recommendation:

- *MBRS Project to support request by Fishing Cooperative in Mexico to host a (MBRS) regional Symposium for Artisanal Fishers, to establish good practice guidelines and codes of conduct for sustainable fishing in the MBRS*

These activities have focused on fishermen; however there was interest expressed in supporting exchanges of the MPA Steering Committee members with their colleagues, at each site.

Recommendation:

- *PCU to explore support for exchange of MPA Steering Committee members between sites.*

Booming Tourism Industry Region-Wide

43. There is growing concern over (i) exponential growth of tourism in the region: e.g., Cruise Ship Industry in the region has grown by over 500% between 2002-2003 in Belize; and in Mexico, growth projections for Riviera Maya include a nearly 3 fold increase from 1.2 Million in the Cancun metro area to over 3 Million along the Riviera Maya between Cancun and Chetumal. In the Bay Islands, cruise ship tourism is also growing rapidly. This growth, along with development investments and resulting migration from the mainland is putting unsustainable pressure on the islands' fragile ecosystems. Efforts to deal with pollution from waste water and solid waste are inadequate, and coastal environments are becoming degraded. There is concern that investments in infrastructure to support accelerated tourism development in the fragile Riviera Maya, which include several MPAs and a Biosphere Reserve, may proceed without adequate environmental planning (e.g., Strategic EAs), enforcement of existing regulations or adequate licensing or pollution fees. These trends could undermine what the MBRS Project and its partners in the region are doing to conserve the MBRS and to deliver benefits from its sustainable use to a wide array of stakeholders. In addition, recognition of the recently completed Central American Free Trade Agreement with the United States, which includes Guatemala and Honduras, increases the likelihood of economic and agricultural activity in the region. Such increases could lead to greater pressure on environmental and natural resources. In all, these threats highlight the need for good governance and transparent policies in the region that are consistent with principles of sustainable use and the conservation of ecosystem goods and services that tourism, fisheries, maritime transport and other sectors in the coastal zone rely on.

44. The environmental and social impacts specifically of the cruise ship industry was also raised as a concern. While the importance of the Cruise Ship Industry to the region as a significant source of new revenue is recognized, concerns were raised in discussions with stakeholders about the need for a sustainable Cruise Ship Policy which is supported by reliable science and which captures resources rents locally for the benefit of affected communities. In Belize, a new Cruise Ship Policy was circulated, which increases the number of allowable daily visitors from cruise ships by 100%, from 4,000/day to 8,000. At these levels, the number of tourists visiting for the day during peak season, would double the resident population of Belize City [Check Belize City population]. Despite the anticipated environmental and social impacts that such a sharp increase in tourism are likely to generate, there was no evidence that this new policy had

been informed by any carrying capacity studies or levels of acceptable change. Nor was there any evidence of systematic consultation with stakeholders. Also lacking was any reference to industry standards or good practice in other parts of the region, or remedies/compensation in the case of an accident or spill.

45. The importance of this sector notwithstanding, tourism activities under Component 3 remain behind. This sub-component need strengthening and actions have been taken to hire a tourism advisor, whose job will be to revamp and revitalize the suite of activities that comprise this increasingly important sub-component of the Project. Discussions with Honduras Institute of Tourism staff reinforced the need to get the tourism component back on track. This includes publication and dissemination of a manual distilling good practice in coastal and marine tourism from case studies presented at the last Tourism Forum sponsored by the Project, held in San Pedro Sula, Honduras, and the launch of the Exemplary Practices Study Tour(s). The latter will bring tour operators from the region in contact with outstanding examples of sustainable tourism ranging from adventure and ecotourism (including recreational diving, catch and release sports fishing, and sea kayaking) to cruise ship and beach tourism. The question of certification of tour operations outside of the hotel industry is currently on hold, pending further studies of consumer demand for such certification (e.g., demand for a Blue Flag program of beach certification in the region) and the feasibility of implementing such certification programs region-wide. In the meantime, the project is seeking to promote voluntary adoption of codes of conduct in line with international best practice through the Exemplary Practices Study Tour and dissemination of the Good Practices manual.

Recommendations:

- *CCAD to elevate development of a sustainable Tourism Strategy for MBRS region to the highest levels.*
- *CCAD to intercede with SICA to request engagement of Tourism Ministries in further elaboration of the MBC Strategy as it has with Agriculture Ministries in their own Commissions*
- *PCU to pursue partnerships with CORAL/ICRAN/UNEP regarding codes of conduct publications to ensure they compliment each other rather than are duplicative.*
- *PCU to conduct feasibility study to determine if Blue Flag Program is appropriate for region based on consumer demand for such certification (e.g., demand for a Blue Flag program of beach certification in the region) and the feasibility of implementing such certification programs region-wide.*
- *PCU to work with SEMARNAT and officials at the State level to engage Quintana Roo State Government as a new partner in implementation of MBRS activities in tourism, fisheries, ecosystem monitoring and environmental awareness campaigns in Mexico.*
- *World Bank to pursue possible partnership with Bonaire as location for site exchange.*
- *World Bank to facilitate discussion among NGOs, government and private sector organizations regarding the environmental sustainability of the cruise ship industry.*
- *Belize National Coordinator and Belize National Reef Committee to investigate plans for tourism development in Punta Gorda. Determine what environmental impact/carrying capacity studies are planned. Determine how MBRS can engage*

with the Belize Tourism Board more closely to monitor plans for tourism development. Also assess threats of forestry activities on reefs.

Harmonization of Fisheries Regulations

46. Illegal fishing is another concern raised by fishermen in the trans-boundary areas (e.g., between Belize and Mexico and in the Gulf of Honduras). This illicit activity is primarily done by independent boats, which are not registered with cooperatives, and which take advantage of the closed seasons in neighboring countries, where resident fishing fleets are in moratorium and patrols are inadequate to ensure compliance all along the coast. Such poaching has raised the need for harmonized fishing regulations at least for transboundary stocks among neighboring countries, and the need for joint enforcement of these regulations to level the playing field and ensure compliance with needed closed seasons or no take zones. There needs to be strong coordination region-wide as well as across-sectors, particularly between fisheries and tourism. This demonstrates the need to align and harmonize sectoral policies affecting the MBRS with the need for ecosystem-based management and no regret options for sustainable development. As described elsewhere, during the Mission, the President of the Fishermen's Association for Qunitana Roo, Mexico proposed holding a Fisheries Congress for the region in which the fisheries cooperatives from all 4 countries would participate to discuss current region-wide issues and agree on Codes of Conduct in line with sustainable fishing.

Recommendation:

- *MBRS PCU to support and help coordinate a Fisheries Congress in collaboration with fisheries cooperatives and conservation organizations in all 4 countries as well as partner organizations.*
- *PCU to table enforcement at next Consultative Group meeting as subject of potential joint investment in the near future*

Additional Follow-Up Actions

The following recommendations are included for consideration by the Project Team, as resources and time permit.

Recommendations:

- *Preparation of draft model laws and regulations to implement framework policy on MPAs, fisheries, sustainable tourism (with a special emphasis on cruise ship and governance policies) developed by Transboundary Commissions and adopted by each country. Introduce the set of model regulations to each government for their review and adoption by each Ministry (either through statutory decree or passage in Congress)*
- *Explore procurement options for Ecosur Lab to provide water quality testing at least for Mexico if not entire MBRS, as a means of capacity building in the region.*
- *PCU to consider establishing a green award program to recognize outstanding government, private sector and/or NGO environmental leadership in the region.*
- *Re-examine Sustainability strategy: In addition to ensuring counterpart contribution of human resources and gasoline during project to carry out essential monitoring and MPA management activities work with regional MAR Fund to establish endowment for sustained MBRS actions.*

- *Follow up with TIDE to expand training to Honduran Garifuna fishing communities under the Bank's Sustainable Coastal Tourism Project*
- *Port Honduras Advisory Council to advise similar councils for other MPAs. (Advisory Council Exchange); set up a small fund for MPA Advisory council to meet periodically; include in MPA management plans.*
- *Engage the private sector (environmental patrons) (e.g., IT hardware for REIS)*
- *Add line item in Goods category for purchase and deployment of a CREWS Station for Belize with NOAA assistance as part of SMP.*

Annex 1: List of Contacts

Annex 2 Logframe Indicators Status (see separate file)

Mid-Term Evaluation
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10 – 19 March 2004

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