

Case Study on the Site Consolidation Process: Rio Platano Man and Biosphere Reserve, Honduras

**Adalberto Padilla, Osvaldo E. Munguía and
Yudith Contreras¹**

Tegucigalpa, April 2003

Introduction

The Parks in Peril program (PiP) has assisted 28 local partners in efforts to change 37 “paper parks” into functional sites in 15 Latin American and Caribbean countries. One of these experiences was facilitated in association with the Mosquitia Development Agency (MOPAWI)² in Honduras’ Rio Platano Biosphere Reserve, from 1998 to 2002. The objectives of documenting this experience are to:

- Analyze the achievements, advances, constraints and lessons learned from implementation of the PiP site consolidation process
- Analyze the Site Consolidation Scorecard methodology as a tool for measuring biodiversity conservation capacity and the functionality of the protected area

The preparation of this document involved a review of documentation, interviews with key persons connected with the site and the authors’ direct experience and participation in the PiP program.

We would like to thank Karen Luz and Sandra Mendoza, of The Nature Conservancy (TNC); Arnulfo Messen, Wilfredo David and Luis Corrales, of the Rio Platano Biosphere Reserve and Forest Region; Víctor Archaga and Héctor Portillo, of the Department of Protected Areas; all the members of the State Forest Administration (Administración Forestal del Estado - AFE-COHDEFOR) and Carlos Molinero, of MOPAWI.

¹ A. Padilla and O. Munguía are Technical Director and Executive Director, respectively, and Y. Contreras is an independent consultant.

² Granted legal status by the Honduran government in 1985, MOPAWI (*Mosquitia Pawisa Apiska* or the Development Agency of the Honduran Miskitia) is a non-profit association based on Christian principles and dedicated to comprehensive human development and conservation of nature. One of its programs is “Integrated Management of the Rio Platano Man and the Biosphere Reserve.”

Background

Created in 1980, the Rio Platano Biosphere Reserve was recognized by the United Nations Organization for Education, Science and Culture (UNESCO) as a world heritage site for humanity in 1982. When first established, the reserve had an estimated area of 5250 km², later extended to 8300 km² by Decree 170-97 and thus becoming one of the country's largest protected areas. There are an estimated 40,000 people in the site, of which 24,000 live within reserve limits.³ Ethnic groups include mestizo (52%), Miskito (43%), Afro-Caribbean or Garífuna (3%), Pech (1%) and Tawahka (1%) (AFE-COHDEFOR/Biosphere Project 1998.) Despite significant miscegenation and social interchange, each people maintains a distinct cultural heritage. The indigenous and Agro-Caribbeans practice different forms of livelihood, including agriculture, fishing, hunting, gathering of fruits and medicinal plants, sale of their labor, etc. This is also true of the mestizos, although grazing and extensive agriculture dominate among their productive activities.

Half of all ecosystems existing in the country can be found in the reserve, including 24 terrestrial and 11 aquatic systems ranging from marine zones, coastal wetlands, pine savanna and rivers to broadleaf forest, at elevations up to 1300 meters above sea level and harboring rich and varied biodiversity (House et al. 2002). Due to its mosaic of natural environments and social and cultural systems, this site, along with the Tawahka Asagni Biosphere Reserve and Patuca National Park in Honduras and the Bosawas National Park in Nicaragua, form what has been called the "Heart of the Mesoamerican Corridor"⁴ since it represents the largest continuous extension of moist tropical forest north of the Amazon.

Despite this distinction and its status as a world heritage site, as late as 1997 the reserve still had no management plan and lacked scientific information about the resource base, species and ecosystems required to support management decisions. Also lacking were tools and practical methods for efficient planning and monitoring of administrative and biological management of the site. Furthermore, initiatives such as the construction of a hydroelectric dam in Patuca National Park inside the Mesoamerican Biological Corridor itself and agrarian reform in Valle de Sico Paulaya placed the reserve at a high level of vulnerability. None of these initiatives materialized, but neither were they completely abandoned. In addition to these pressures, the four most important threats that year were advance of the agricultural frontier, illegal logging, scarce and ineffectual administrative policies or deficient application of those that existed, and trade in wildlife. Due to these threats and other institutional weaknesses, UNESCO included the reserve in its list of endangered sites in 1995.

AFE-COHDEFOR assumed legal responsibility for the reserve in 1992⁵, although it was only recently, in 1997, that the agency established a presence with the creation of

³ The Rio Platano Biosphere Reserve has three zones: the core zone, the cultural zone and the buffer zone. The cultural zone coincides with territories used historically by indigenous and Afro-Caribbean communities. Mestizo communities have settled in the buffer zone, and in 1997 more than 100 families were living in the core area. AFE-COHDEFOR reported that there were still 10 families inhabiting the area in 2003; the others received an indemnity from the State and were relocated.

⁴ So designated by the secretariats of natural resources and environment of Honduras and Nicaragua in December 2001.

⁵ Before 1992, it was administered by the General Directorate of Natural Resources, which no longer exists.

the Forest Region.⁶ At the end of 1996, three new townships were created⁷ whose limits fell within the reserve and its area of influence. At that time MOPAWI was the main nongovernmental organization and had been working in the northern zone of the site since 1985, supporting sustainable development processes and certain conservation activities in the reserve. In the mid-1990s other nongovernmental organizations began working in the area, such as World Neighbors, Asociación Bayan, Fundación Río Platano and Organización de Desarrollo Étnico Comunitario (ODECO).

The Parks in Peril Program at the Site

Facilitation of the PiP program in the reserve was arranged between TNC and MOPAWI through a cooperation agreement initially signed for five years, from October 1997 to September 2001. In practice, the agreement was extended to the end of 2002.

The process of formulating the base document for PiP intervention in the reserve was preceded by reconnaissance visits by TNC staff to learn about and identify existing problems and threats and to ascertain institutional presence and experience at the site. Under TNC leadership with support from outside consultants, an initial study was made of the site, contributing elements to structure intervention. The goals, objectives and activities formulated for the work plan when the PiP program began complemented or strengthened actions facilitated by MOPAWI and other public and private actors in the reserve.

Goals were the following:

- **Management and protection:** Strengthen management and protection of the Río Platano Biosphere Reserve
- **Long-term security:** Develop institutional, financial and political mechanisms assuring the long-term conservation and administration of the reserve
- **Project management:** Build MOPAWI's management and administrative capacity to implement the PiP program
- **Community participation and compatible development:** Engage local inhabitants and groups and provide capacity-building for conservation and management of the reserve's natural resources

The objectives proposed for reaching these goals through the PiP program were:

Basic protection activities

- Establish basic infrastructure for site protection
- Increase technical and administrative staff
- Provide technical and administrative capacity-building for staff
- Assess threats and define strategies for abating or mitigating them
- Support legal processes to extend the reserve and create other protected areas in the Mosquitia

⁶ Since that year, AFE-COHDEFOR has been receiving technical, financial and logistical assistance from the Biosphere Project, supported by German Technical Cooperation (GTZ.)

⁷ The townships created were Wampusirpe, Ahuas and Juan Francisco Bulnes.

Long-term management

- Support reserve zoning
- Support participatory formulation of the management plan
- Collect scientific information necessary for improving management effectiveness at the site
- Support the design and implementation of a monitoring system

Long-term financing

- Support the definition and approval of a long-term financing mechanism for the site
- Strengthen the institutional capacity of MOPAWI, particularly the board of directors and leadership team
- Increase the organization's capacity to negotiate and coordinate with local, national and international organizations

Support for active local groups

- Strengthen the operational and administrative capacity of the Local Inter-institutional Committee (CIL);
- Facilitate participation and strengthen grassroots groups and township governments
- Strengthen inter-institutional coordination and communication in the townships of Brus Laguna, Ahuas and Wampusirpe
- Strengthen projects for compatible economic development implemented by MOPAWI
- Support the implementation of new projects for compatible economic development
- Support community pilot projects for compatible economic development
- Support community pilot projects for natural resource management and protection
- Strengthen and expand the environmental education program in and around the reserve
- Support the formulation and negotiation of policies assuring long-term conservation of the reserve

With these objectives, intervention by the PiP program was oriented toward complementing and strengthening actions already underway at the site.

4. The Site Consolidation Scorecard

The Site Consolidation Scorecard methodology was designed by the PiP program TNC had been executing in several Latin American countries since 1990, with support from the U.S. Agency for International Development (USAID). Its purpose was to measure the achievements and progress of PiP at each site and set multi-year objectives to improve the functionality of the “parks in peril.” This tool has four general indicators: a) basic protection activities, b) long-term management capacity, c) long-term financing for the site and d) site constituency. It also includes 16 benchmarks to gauge functionality and the level of consolidation using a scorecard designed for this purpose.⁸

The scorecard was designed as a self-evaluation tool to be applied by the partner organization implementing the project, often accompanied by TNC staff connected with the site. In the case of the Rio Platano Biosphere Reserve, actors' participation in scorecard application varied at different moments.

⁸ A complete description of the tool, including its indicators, benchmarks and scoring can be found in the document prepared by TNC and USAID, “Measuring Success: The Parks in Peril Consolidation Scorecard.”

In the initial baseline assessment (1997), leaders of MOPAWI participated with two TNC staff members providing support. After a process of induction and orientation on how to apply the tool, application was extended to take advantage of a wider range of participants and their knowledge and experience in the site, supported by the information available. The exercise did not include a detailed description of what was meant by the maximum score expected at the end of the PIP intervention.

1998, 1999 and 2000 evaluations. This activity took place each year in the capital city of Tegucigalpa at sessions that lasted up to five hours. During these years, participation in scorecard application expanded to include other key institutions, such as the Department of Protected Areas and Wildlife (DAPVS) and the Rio Platano Biosphere Project and Forest Region, of AFE-COHDEFOR; the Division of Biodiversity (DIBIO), under the Secretariat of Natural Resources and Environment; the Department of Ecotourism of the Honduran Institute of Tourism (IHT) and representatives of the Environmental Division at the Honduran office of USAID. The experience was strengthened in a way with the creation and coordination of the Inter-institutional Technical Team (ETI) functioning as part of the “Compañeros para la Biodiversidad” project implemented by MOPAWI with support from the U.S. Department of the Interior (USDO). This encounter of actors directly or indirectly connected with the site gave rise to a forum for exchange of experience and discussion among actors interested in making the evaluation as objective as possible and in setting up strategies to promote site consolidation. However, situations occurring at some events revealed differences of opinion about the basis and scope of scoring, causing certain actors to assume defensive positions since these analyses were supposedly evaluating the effectiveness of their institutional actions.

2001 and 2002 evaluations. During these two years participation in scorecard application decreased when DAPVS institutionalized the management effectiveness tool designed by PROARCA in 2000. To a large degree, this new tool for monitoring protected areas contained the same indicators and benchmarks as the PiP site consolidation scorecard, plus other variables and indicators expanding the themes or spheres of evaluation. The idea was to apply this new tool to the reserve and establish baseline data. For various reasons, understanding and coordination among the entities was not achieved, even though a workshop on applying the tool was held at the site. As a result, in 2001 a meeting was organized with several of the institutional actors that had been participating in PiP scorecard application during previous years, in order to follow up on those indicators and benchmarks. In 2002 the DAPVS asked MOPAWI not to duplicate efforts and suggested that everyone apply the PROARCA monitoring tool, and in that year the heads of MOPAWI led the evaluation with technical assistance from TNC staff in Tegucigalpa.

Participants in scorecard application were officials based in Tegucigalpa who were working or had agencies at the site and who provided an introduction on the objectives and scope of the tool during the workshops held each year. This rapid training in the use of the tool yielded positive results since it enabled participatory discussion and evaluation of the site, although perhaps not enough for a real understanding on the part of certain members, or ownership by institutions.⁹

⁹ The current directors of the Rio Platano region and advisory personnel for the AFE-COHDEFOR Biosphere Project, who have been working for about a year, said they were not familiar with the Scorecard tool, although they were

Nevertheless, in the years when the scorecard was applied, it influenced institutional priorities and plans for addressing the site's most urgent needs and problems, and helped improve its functionality.

Other monitoring tools applied in the reserve

As mentioned previously, the DAPVS incorporated application of the PRAORCA-designed management effectiveness tool in its monitoring system for the protected areas of Honduras. The system has 43 indicators in five areas: social, administrative, natural and cultural resources, policy and legislation, and economic-financial. This tool clearly has more areas and indicators than the PiP scorecard, although the purpose is similar or even identical. Local actors directly involved in the reserve have participated in workshops on scorecard application held at the sites, with all the costs this implies. However, continuous application of the tool has not been possible. Of the 102 areas existing in the country, 16 applied the tool in 2000; 4 in 2001; 4 in 2002 and just 1 in 2003. Only El Chile Biological Reserve has applied it for four years running. According to Victor Archaga, "The weak ownership of the tool is due to several factors: limited understanding of its objectives and scope; little technical assistance, the high cost of holding the workshops every year, and results are not linked to a system of institutional and site planning and monitoring."

On the other hand, the Biosphere Project and Rio Platano Forest Region have carried out noteworthy analysis and reporting on the loss or gain of plant cover based on satellite images and geographic information systems (GIS.) Likewise, a monitoring and evaluation program has been set up in the reserve, with 32 indicators measuring progress and achievement of objectives in each program contained in the site's management plan and the Biosphere Project. While this tool is more of an institutional type, it does have indicators that can give an account of the state of conservation of the resources, species and ecosystems of the Reserve. For example, in 2002 and 2003 the presence of 2 to 3 indicator species is confirmed, and from 2002 to 2006 deforestation is reduced by 10% each year. This monitoring and evaluation system is the one actually used by the Forest Region to set its priorities and focus investments. Although this system could be complemented with the PiP and PROARCA scorecards, for the moment they are not connected and linked. In essence, as Carlos Molinero mentioned, "the Rio Platano Biosphere Reserve has its own monitoring system approved in the site management plan, and which has very little connection with the monitoring system administered by the DAPVS" at the national level.

Results of scorecard application in the reserve

Overall, application of the scorecard shows progressive advances toward the site's consolidation in comparison with the base year in terms of the different indicators evaluated (see table 1.) Clearly, these advances are not due exclusively to the PiP program; they also respond to the synergy and complementarity of all the public and private initiatives carried out in the reserve over the past five years.

interested. In any case, this shows the institutional weakness in follow-up on processes and commitments due to staff turnover.

Table 1. Application of the Scorecard in the Reserve: Annual Indicator Scores

Indicator	Start 1997	1998	1999	2000	2001	2002	Meta
A. Basic Protection Activities							
A.1 Physical infrastructure	2	3	3	3	3	3	4
A.2 On-site personnel	2	2	3	3	3	3	4
A.3 Training	2	2	4	4	4	4	5
A.4 Land tenure issues	2	2	3	3	3	4	4
A.5 Threats analysis	3	3	3	3	3	5	4
A.6 Official declaration of protected area status	5	5	5	5	5	5	5
B. Long-Term Management							
B.1 Reserve zoning and buffer zone management	3	3	3	3	3	4	4
B.2 Site-based long-term management plan	1	2	2	2	2	5	4
B.3 Science and information needs assessment	2	2	3	3	3	4	4
B.4 Monitoring plan development and implementation	1	1	2	2	2	3	4
C. Long-Term Financing							
C.1 NGO's self-sufficiency plan	2	3	3	3	3	4	4
C.2 PiP site long-term financing plan	1	2	2	2	2	2	4
D. Site Constituency							
D.1 Broad-based management committee/technical advisory committee	2	2	4	4	4	4	5
D.2 Community involvement in compatible resource use	3	3	3	4	4	4	4
D.3 Policy agenda development at national/regional/local levels	2	2	2	2	2	3	4
D.4 Environmental education programs	3	3	3	2	4	4	4

Source: Based on the database contained in the Parks in Peril final report on consolidation of the Rio Platano Biosphere Reserve. 2002

Symbology:

1	2	3	4	5
No work has been done	Work begun	Progress made	Adequate	Excellent

Based on the results, some indicators evidently point to weaknesses in physical infrastructure, personnel, monitoring and implementation of a monitoring plan, a long-term financing plan for the site (which would in turn require the creation of mechanisms for funds administration that are longer lasting) and development of the policy agenda in regional, national and local spheres (at this moment, several laws and policies are undefined, not applied or contradictory, constituting one of the major sources of threats to the reserve.)

Due to particular circumstances, some indicators have obtained a score of 4 but could drop very rapidly if institutional capacity and investments are not maintained, affecting the site's functionality and consolidation. This is exemplified by the indicators on land tenure (currently there are unresolved demands on the part of

indigenous communities, mestizo campesinos and township governments) and personnel and training (which could be affected by the high staff turnover rate every year.) Thus it is important to keep in mind that indicator scores can vary from one year to the next (go up or down) due to internal or external factors affecting administration of the site or depending on the experience or position of the participants making the evaluation. This makes it necessary to view this tool with the appropriate flexibility, as an instrument whose application generates a learning process and a collective negotiation of options for ensuring and advancing the consolidation of the protected area.

On the other hand, the scorecard does not measure direct impact on conservation or success in reducing threats in a protected area, and this is perceived as a weakness. The scorecard could be improved by including other indicators to gauge impact on conservation, and by making current indicators more specific or promoting their importance.

Value added of the scorecard to the site consolidation process

The results of this analysis showed that introduction and application of the scorecard generated the following value added:

- It satisfied the need for a practical, simple and low-cost tool for monitoring and evaluating functionality, and for prioritizing actions that contribute to site consolidation
- In addition to evaluating indicators and benchmarks, it also generated a process of discussion and analysis of the reserve's situation, with inter-institutional participation and commitments.
- It strengthened a training and learning process, linking and tying in annual scorecard results with yearly planning in the PIP program and other participating institutions.
- It generated adaptive learning as a basis for monitoring the effectiveness of the actions carried out, identifying and prioritizing needs and problems, strategies and activities for consolidating the site.
- It helped establish a flexible planning process so that adjustments could be made to the activities originally contemplated in the PIP program and in the plans of other organizations in order to keep pace with the ever-changing dynamics of the site.

Above and beyond the scores resulting for each indicator, application of the PIP scorecard with the participation of several key actors generates a process of collective learning and commitment and generates synergy in coordinating and complementing efforts. We share the opinion of Karen Luz (TNC) when she states that the scorecard "is a very effective tool for measuring institutional capacity to manage and protect the site."

Institutionally, MOPAWI has appropriated this tool and currently links it with the planning system as a means of prioritizing and orienting interventions at the reserve. This has not occurred with the other participating institutions in Honduras not using the tool at this moment. It is evident that ownership of the tool first requires a clear understanding of its utility. Perhaps this requires a more intensive training effort as well as appropriate follow up and technical assistance. Another explanation may lie in the institutionalization of the other tool- that of PROARCA- by DAPVS. Even though it is not being applied, this is the one recognized as official. It has still not been institutionalized as an effective tool for measuring the functionality and consolidation of protected areas outside of the PiP program or for orienting and defining assistance for a site and a local nongovernmental organization.

Weaknesses of the scorecard

Certain weak points have been identified in the scorecard's application to the reserve, with the most important being the following:

- It does not measure results and impacts (negative and positive) on conservation of ecosystems, resources and species at the site, nor does it delve very deeply into the human context.
- All the indicators have the same weight in terms of scoring. This does not seem appropriate since, in practice, there are some indicators that are more critical than others.
- Scorecard results can be imprecise and less than objective unless the optimal scenario expected for each indicator is defined and agreed to, thus providing the basis for assessing the situation of the year being evaluated.
- A more explicit design is needed to ensure that scorecard results are truly articulated with the planning processes of other institutional actors that support management and protection of the area.

Several of these weaknesses could be overcome by adapting the tool to the situation of each site, and perhaps complementing it with other monitoring and planning instruments being applied in the country.

Results of the Parks in Peril Program

It is a complex task to pin down the results and products resulting exclusively from a given intervention, since there are factors both internal and external to the facilitating entities that favor or hinder achievements. In this case, two important factors are worth mentioning. First, since MOPAWI had been supporting several activities at the site with the cooperation of other partners,¹⁰ it had in-house capacity (staff, logistics and financial resources) as matching contributions to implementation of the PIP program. Secondly, with the support of German Technical Cooperation (GTZ), AFE-COHDEFOR's presence had begun in 1997 as a State initiative to manage and protect the reserve.

With this in mind, below is a summary of the most important achievements and advances obtained in the reserve through the PIP program. More than concrete products, this intervention generated a comprehensive process of national capacity building for progress toward consolidation of the site.

Basic Protection Activities

- ***Infrastructure:*** MOPAWI's Belen office and logistics at the site were strengthened, are being maintained, and constitute the NGO's most important center of operations in the reserve.
- ***Training and staff:*** Opportunities and technical training for both MOPAWI and AFE-COHDEFOR staff stationed at the site, especially with the introduction of several tools and methodologies that are contributing to the site consolidation process, such as the Scorecard, site conservation planning, and rapid ecological assessments. It must be recognized, however, that the limited capacity for reaching long-term financial sustainability had negative effects on retaining key staff members who had received training.

¹⁰ MOPAWI's main partners at the beginning of the PIP program included the Tear Fund UK (1985 to the present), WWF-CARO (1997-2001), the Center for the Support of Native Lands (1991-2002) and USDOJ (1995-1998).

- **Land tenure:** Support was provided for indigenous federations (MASTA and RAYAKA) in the process of negotiating land tenure and use rights from the government, and an agreement was signed between MASTA and the National Agrarian Institute (INA) in which the latter committed to exploring mechanisms and initiating the legalization of indigenous lands. However, official transfer of INA-held reserve lands to AFE-COHDEFOR appears to have created a legal imbroglio that, added to the government's lack of political will, has stalled progress in negotiations on this issue. Arnulfo Messen (AFE) states that, "from now on use (beneficial ownership) agreements will be negotiated with indigenous communities and townships. This legal figure would legalize rights to use natural resources, but not ownership of them." This mechanism surely will not resolve the problem of land tenure, but it will give communities a certain security, particularly if the agreements signed have a duration of more than 40 years.
- **Threats analysis:** A rigorous participatory¹¹ analysis was made of threats to each biodiversity element or conservation target identified as a priority, thus setting forth the problems and challenges ahead. At the same time, it has stimulated resource mobilization and the identification of institutional capacities to reduce or eliminate those threats.
- **Official declaration of protected area status:** The Rio Platano Forest Region and Biosphere Project was supported through actions promoting Decree 170-97, which extended reserve limits and formalized its macrozoning, along with participation in the coalition lobbying the National Congress on behalf of the 1999 creation of two protected areas adjoining Rio Platano: the Tawahka Asangni Biosphere Reserve and Patuca National Park, whose protection is strategic for the Rio Platano.

Long-term management

- **Reserve zoning:** MOPAWI collaborated with the AFE-COHDEFOR Forest Region and Biosphere Project in part of the subzoning process for the reserve's cultural and buffer zones, which resulted in three subzones- multiple use, extensive use and special use-, as well as a list of regulations on use of the resources in them. This process was participatory. However, because it took so long to formalize these norms (over a year) and due to changes in aspects arranged with communities, application has been very limited. A tentative internalization and ownership of the norms is being observed.
- **Long-term management plan:** In 2000, AFE-COHDEFOR published the reserve management plan incorporating suggestions and recommendations from MOPAWI and TNC. Technical and methodological support was also provided for AFE-COHDEFOR in site conservation planning (SCP) for the reserve, through a participatory process that included leaders of indigenous organizations, township officials, scientists and technicians from different institutions. This document was concluded in 2002 and will soon be published by PROARCA. Likewise, SCP methodology has been applied to priority conservation targets such as coastal wetlands, which is helping to focus new interventions toward the implementation of strategies and actions leading to threat abatement or elimination, and promoting local participation and self-sufficiency.
- **Science and information needs assessment:** In 2000, MOPAWI drafted the research and development strategy for the reserve taking into account science information needs to

¹¹ Included the participation of technicians, scientists, representatives of township governments and the leaders of indigenous, Afro-Caribbean and mestizo campesino organizations.

improve management decisions and guidelines on the formulation of a socioenvironmental research strategy. This document was shared with AFE-COHDEFOR to enrich the investigation program contemplated in the management plan. In addition, an ecological appraisal was made of the reserve and published in 2002 under MOPAWI leadership with technical and financial assistance from TNC, the AFE-COHDEFOR Biosphere Project, the Biology Department of Universidad Nacional Autónoma Hondureña (UNAH) and Universidad Pedagógica de Honduras. For the first time and with due scientific rigor, key socioeconomic information is now available for site management and has been appropriated by the different institutional actors with jurisdiction over or interest in the reserve. Furthermore, this investigation enabled cooperation alliances to be formalized with the universities and with the different organizations having authority over the reserve, including the indigenous, Agro-Caribbean and mestizo communities.

- *Monitoring program:* Yearly Scorecard application provided timely information for decision-making by those in charge and by other agencies with authority over the site, although it was not sufficiently internalized and owned. Despite this, with support from PROARCA it was possible to train personnel and institutionalize the management effectiveness tool for protected areas in Honduras, along with methodology for biological monitoring. The PiP program also supported community-based conservation initiatives that generated unconsolidated experiences in monitoring of certain species, such as the green iguana and sea turtles. In addition, maps were created showing the location of indicator species for the priority conservation targets¹². These have not yet been shared sufficiently to use as a referent in the establishment of a community monitoring system.

Long-term financing

- *Long-term financing plan for the site:* With a view to site consolidation, methodology for long-term financial planning for the site has been shared with AFE-COHDEFOR authorities, emphasizing the importance of such information to ensure long-lasting processes and continuity of the actions undertaken. An influencing process carried out by MOPAWI, TNC and PROARCA resulted in the implementation of this activity with AFE-COHDEFOR in 2003. At the same time, MOPAWI, the World Wildlife-Regional Office for Central America (WWF-CARO) and World Neighbors have created the Biosphere Fund Foundation as a second entity that will raise resources for an endowment fund and to support conservation and development initiatives in the reserve. Even taking these initiatives into account, without a financing plan or fund raising strategy, what remains is a fragile situation, particularly once Biosphere Project funding from German Technical Cooperation (GTZ) comes to an end.
- *NGO self-sufficiency plan:* The following tools and guides contributing elements for institutional strengthening have been shared with MOPAWI: the Four Pillars of Financial Sustainability; Rumbo al Éxito: Una guía para juntas directivas de organizaciones sin fines de lucro (The Road to Success: A Guide for the Boards of Non-Profit Organizations) and Resources for Success: A Manual for Conservation Organizations in Latin America and the Caribbean. In addition, an institutional financial analysis was supported, providing additional elements for internal reflection in MOPAWI regarding a long-term financial strategy. For now, MOPAWI has a strategic programmatic plan for 2001-2005, a finance and administration system, other alternatives for generating its own income such as selling plane tickets (not terribly significant in relation to the organization's fixed costs, but shows

¹² These maps were created as part of the study on fauna in the ecological appraisal made of the Rio Platano Biosphere Reserve.

institutional interest in exploring other financing options) and four donors supporting its programs and projects. Elsewhere, work has begun to strengthen the board of directors, and the creation of a consultative council to advise MOPAWI leadership was supported.

Site Constituency

- *Management committees:* The Local Inter-institutional Committee (CLI)¹³ functioning before the AFE-Biosphere Project was implemented disappeared when, in 1998, AFE-COHDEFOR created two entities bringing together actors exercising influence in the reserve: the six Zone Steering Committees (COZOB) at the level of townships, and the Regional Steering Committee for the Biosphere (COROB) at the overall level of the reserve. Both entities need to be strengthened in order to carry out their mandate. At the same time and as a part of this process, several local organizations have been assisted with their technical, administrative and logistical action, such as the Organization of Indigenous Communities of the Zone of the Rio Platano Biosphere Reserve (RAYAKA), the Plaplaya Community Committee for Sea Turtle Conservation and the township governments of Juan Francisco Búlnes and Wampusirpe.
- *Community participation in compatible resource use:* Support and technical assistance were provided for the projects in compatible economic development and conservation MOPAWI had been executing before the PiP program began, such as the promotion of agroforestry systems (cacao alongside timber trees), alternative rural financing through community chests, promotion and support for community-based ecotourism businesses (Las Marías), sea turtle protection in Plaplaya, conservation of green iguanas in Brus Laguna, a butterfly farm in Rais Ta and management and protection of small microwatersheds. New conservation and development initiatives have been supported through the PiP program, including the management of small herds in Palacios, yucca processing and small-scale cassava production in Batalla and community management of the coastal wetlands of Ibans and Brus. In general, these experiences have stimulated the motivation and involvement of communities and other local stakeholders, and have strengthened understanding of the link between compatible economic options producing direct benefits for the population and conservation targets at the site.
- *Influencing the policy agenda:* Leadership and recognition of MOPAWI was strengthened with respect to its lobbying efforts and participation in several networks: the Honduran Agroforestry Alliance, the Alliance of Nongovernmental Organizations Working in Protected Areas, the Federation of Private Development Organizations, the Sectoral Panel on Environment and Risks, the Honduran Network for Broadleaf Forest Management (REMBLAH) and the National Council on Protected Areas. Several processes to establish policies and laws have been influenced, including the reserve management plan, the anteproject for the forestry law, extension of reserve limits and the creation of two new protected areas (Tawahka Asangni Biosphere Reserve and Patuca National Park.)
- *Environmental education:* Environmental education activities facilitated by the PiP program employed several education and communication strategies, including talks and workshops; trips to exchange experiences; posters, bulletins and notebooks illustrating environmental themes and radio and TV programs. Although no rigorous study has been made, it is considered that knowledge has been broadened and attitudes and practices have improved

¹³ This was a participation mechanism comprised of Miskitos, mestizos and Garifunas, created to address critical issues that threaten the reserve.

concerning the importance of conserving the reserve among direct users of resources inside the site, as well as among technicians, decision makers in public and private entities related to the reserve and the general public. This effort was not restricted to the Rio Platano Biosphere Reserve, but extended as well to the Tawahka Asangni Biosphere Reserve and Patuca National Park—in other words, throughout the heart of the Mesoamerican Biological Corridor in the Honduran Mosquitia.

Factors Affecting the PiP Program

The results of conservation and development efforts can be affected positively or negatively by different circumstantial or structural factors, internal or external, whether they are social, economic, political, cultural, institutional or even related to natural phenomenon. Given the above, and without attempting to be exhaustive, elements that are considered to have influenced or affected the outcomes and performance of the PiP program are described below.

Positive Internal Factors

- *MOPAWI was prepared to initiate the PiP program:* MOPAWI had experience in working with culturally different communities; it had leadership, credibility and relations with local organizations and government institutions having authority in the reserve; it had infrastructure and logistical capacity at the site and in Tegucigalpa, as well as personnel and complementary financial resources from other partners who joined in to implement the PiP program.
- *TNC's credibility and recognition as a conservation organization:* TNC not only contributed tools and work methodologies, but also facilitated alliance building and cooperation with academic institutions and public entities involved with the site.

Positive External Factors

- *There was a need for scientific socioenvironmental information for site management and protection:* Although the reserve was created in 1980, when the PiP program began there was no management plan and a lack of scientific data for decision-making. The PiP program closed this gap.
- *At the end of 1995 UNESCO put the reserve on its list of endangered sites:* Because the reserve is a world heritage site, government agencies, civil society actors and national organization became interested and concerned about saving its status. The Honduran media mentions this protected area more than any other.
- *Recent creation and start-up of the Forestry Region and Biosphere Project in 1997,* which has begun to establish a presence at the site. There are still some obstacles to the creation of a clear conservation policy and application of current laws, which was one of the communities' expectations in light of the growing pressure of the agricultural frontier. For its part, the Biosphere Project, initially conceived as an advisory entity for the Forest Region, is now involved more directly in implementing actions. Despite these weaknesses, this institutional presence is recognized as having supported and complemented the PiP program.

- *Protection for the reserve has been supported by the existence of other initiatives*, such as the Mesoamerican Biological Corridor (MBC) and the “heart of the MBC” declaration, the binational (Honduras and Nicaragua) proposal to create a transboundary biosphere reserve including the Rio Platano and Tawahka Asangni reserves and the Patuca National Park, in Honduras, and the Bosawas Biosphere, in Nicaragua.
- *The openness of local organizations toward participating in PiP-facilitated activities and processes*, including local governments, leaders of indigenous federations, campesino groups, community groups, etc. While it has been possible to foster organizational capacity in groups with varying orientations (conservation of endangered species, political influencing, microwatershed protection, etc.), they are at an incipient stage and would benefit from a capacity-building program.
- *Favorable legal framework for the themes in indigenous communities*: With the Honduran Government’s ratification of International Labour Organization (ILO) Convention 169 on indigenous peoples in 1994, a favorable legal framework was created on behalf of indigenous and Afro-Caribbean communities in the country. This is one of the themes that can be developed extensively by the strengthened local organizations.

Internal Constraining Factors

- *Technical*: Most of the MOPAWI staff stationed at the site were paid with funds from another donor, and when this cooperation concluded at the end of 2001 the structure was weakened. The organization also has a high turnover of technical personnel, including three directors for the PiP program during its period of implementation. This is partly related to insufficient work incentives.
- *Financial*: There were weaknesses in fulfilling some of the administrative requirements connected with the preparation of financial reports, causing delays in disbursements for the PiP program.
- *Communications and coordination*: Except for the first director of the PiP program in the reserve, none of the directors maintained direct communication with TNC staff to keep them informed about actions at the site. Communications between MOPAWI and TNC were handled through the executive and technical directors who were well informed about the process but had a more managerial perspective.
- *Logistics*: Although several efforts were made to improve communications between the reserve and Tegucigalpa, the radio and telephone systems set up were not very efficient or effective since they were frequently out of order, affecting exchange of information. The same thing happened with the computers, which were inoperable on several occasions due to the salt and transfer by canoe. The U.S.-made outboard motors were not appropriate for the site since people did not have a good idea of how to repair them and sometimes it was difficult to obtain spare parts.

External Constraining Factors

- *Natural disasters*: The passage of Hurricane Mitch at the end of 1998 damaged a large part of the productive and social base of the communities living in the reserve and its area of influence. This phenomenon was followed by tropical storms Katrina (1999) and Michelle

(2001), once again causing the reserve's main rivers to flood and again affecting communities' productive base. This emergency situation led to delays in project operations since local organizations and families were more interested in recovering and rehabilitating their crops than in participating in any other type of process.

- *Poorly defined post-natural disaster interventions without environmental considerations and with a paternalistic approach:* Attention after the natural disasters led to an increase in interventions for aid and rehabilitation by several public and private entities whose methodologies were quite welfare-oriented, with monetary incentives offered to the participating population. In a certain way, this affected processes that had been initiated with the PiP program. Again, these interventions did not reflect any concern for the environmental dimension.
- *Staff turnover in public agencies:* The high turnover of directing and technical personnel in the AFE-COHDEFOR Forest Region and Biosphere Project affected continuity and communication, delaying several processes both at the site and at managerial levels. As an illustration, during the implementation of the PiP program the head of the Biosphere Forest Region changed four times and more than 10 of its technicians left¹⁴, were transferred or retired from their posts. Even more, during this period it was necessary to work with government officials under three different presidents. The consequent changes and turnover of the heads, directors and ministers of public agencies affected continuity and follow through on agreements that had been made.
- *Insufficient coordination with the AFE-COHDEFOR Forest Region and Biosphere Project:* From the onset of the PiP program, although MOPAWI and TNC made special efforts to establish a strong alliance and coalition with the Directorate of the AFE-COHDEFOR Forest Region and Biosphere Project, these were not sufficient since it was not possible to set a work agenda, maintain transparent communication and develop a relation of inter-institutional trust and complementarity in interventions. To a certain degree, this effort was hindered by inter-institutional issues, since some of MOPAWI's activities were viewed as competition overshadowing AFE-COHDEFOR actions in the area.
- *Land tenure conflicts affected local participation:* The transfer of reserve lands held by the National Agrarian Institute (INA) to AFE-COHDEFOR impacted adversely on the motivation of the indigenous communities, who saw their goal of obtaining legal security for their lands frustrated. At the same time, the indigenous' strong stance in defense of their land, which had kept new colonists from entering the reserve, was blocked since the transfer made these lands public goods of common use. Colonists took advantage of this new status to invade indigenous lands, causing social conflicts.
- *Failure to apply laws and regulations governing the reserve:* Arguing that the management plan had not yet been approved, from 1997 to 2000 State agencies took a weak position in applying norms established for site management purposes and other national provisions governing the area, resulting in a large vacuum of authority heavily exploited by colonists, professional speculators and illegal loggers.
- *Advance of the agricultural frontier and illegal logging:* A 1995 governmental decree placed Valle de Sico Paulaya, bordering the reserve to the west, under agrarian reform. As a result,

¹⁴ Some technicians find it difficult to adapt to contexts that are culturally different and where basic services (water, electricity, etc) are limited, and leave after six months or one or two years of work.

there is an increased presence of new colonists, including communities that have settled in the reserve's area of influence and are using resources inside the site. In addition, AFE-COHDEFOR granted permits to exploit dead wood¹⁵ without prior inspection and accompaniment *in situ*, leading to an increase in illegal logging within the reserve and its area of influence. All of this had an influence on community motivation and involvement in the reserve, especially indigenous and Afro-Caribbean peoples.

- *Division of the Morava Church*: The internal division of the Morava Church, the institution with the longest and greatest presence in the Mosquitia and the reserve, also created divisions among families in the communities. Working with families in one faction upset those in the other faction. Until late 2001, this created strong tensions between families and divisions in the communities, affecting normal operations of the project.

Lessons Learned and Recommendations

Scorecard Application

- *Training, technical advising and commitment of the interested parties*: Effective Scorecard application should be accompanied by a training process on the objectives, scope and use of this tool so that all parties commit to using the results derived from its application. This suggests that *ideally, it should be applied by a small group of participating organizations interested in the site*, since this generates synergy of resources and capacities and promotes dialogue and cooperation among the participants. Keeping the group small also ensures that annual meetings or workshops for Scorecard application will not be so burdensome.
- *Need to link Scorecard results with the planning systems of the site and institutions*: This will ensure that application results in something more than a simple evaluation exercise, and instead forms part of a process that helps to identify gaps or needs where actions should be focused to improve the site's functionality.
- *It is necessary to harmonize and promote complementarity among the tools*: Since several tools are being used or planned for use and recognizing that each has its strengths and weaknesses, an effort to harmonize, link and, if possible, unite them would be useful. This would promote complementarity and avoid duplication of efforts and resources. Clearly this is only possible if a technical agreement is reached and those in charge of making policy decisions give their support. When there are official systems or tools with objectives similar to or the same as those of the Scorecard, the most reasonable thing would be to support the application of the former and perhaps enhance them or reach some kind of agreement to apply the Scorecard but making sure it is articulated with site monitoring and planning systems.
- *The Scorecard should be more flexible to make it relevant, pertinent and adapted to the particularities of the site and the local institution*: For example, the Rio Platano Biosphere Reserve has three objectives: conservation, human development and education and investigation (logistics.) It would be useful to define indicators measuring whether the site is meeting its objectives so that evaluation of its consolidation is more focused and objective.

¹⁵ More of these permits were issued after Hurricane Mitch at the end of 1998, based on the claim that a quantity of trees had been destroyed as a result of this natural phenomenon.

- *Importance of defining the optimal scenario expected for each indicator within a given period, before the Scorecard is applied:* This would give consistency to evaluation made on a periodic basis. Otherwise scoring is done without clarity as to the referent visualized as optimal. It should be recognized that these referents can change over time, so their relevance can vary from one period to the next.
- *Clarification of the benchmark guidelines would help to make judgments that are more objective and specific to the site.* This suggests an additional need to adjust benchmark guidelines to the particularities of each site, even though they may not be as relevant and pertinent to other areas and thus somewhat reduce the possibility of comparing the consolidation of multiple areas.

Overall Action of the PiP Program

- *The greatest value added of the PiP program was the learning derived from introducing and training on the use of tools and methodologies to support site conservation efforts and institutional strengthening,* and which complemented and encouraged strategic thinking on how to build capacities to conserve site biodiversity. The tools and methodologies contributed by the PiP program were the following:
 - The Site Consolidation Scorecard
 - Site Conservation Planning and Measures of Success
 - Rapid ecological assessment, including the generation of scientific information for site management and protection
 - Four Pillars of Financial Sustainability
 - Rumbo al éxito: Una guía para juntas directivas de organizaciones sin fines de lucro (Path to Success: A Guide for the Board of Directors of Non-Profit Organizations)
 - Resources for Success: A Manual for Conservation Organizations in Latin America and the Caribbean
- *The sciences are key to conservation and development:* Efforts for the conservation and consolidation of a protected area should be based on an understanding of the socioenvironmental dynamics arising from the connection and interaction between ecological and social systems, making contributions from research and science indispensable. This helps improve decision making for the site's management and protection and the promotion of compatible economic options providing direct benefits to local users and commitments to greater participation in the site's conservation. The contribution of sciences *should not exclude but rather augment popular knowledge and experience.*
- *Design of a comprehensive plan that recognizes and incorporates particularities and changing dynamics at both the site and the partner NGO and fosters learning:* While the PiP program can have general guidelines for all the sites, it should consider the special characteristics, needs and dynamics of each area and local partner since this would help to design a more comprehensive and flexible intervention. Joint actions and processes should be incorporated that contribute not only to the site's conservation but also promote and favor learning and processes over results and products. This leads to the recognition that *there should be strategies and methodologies adapted to the characteristics and particularities of the local situation.*
- *Recognition of the interconnectedness and complexity of ecological and social systems that go beyond the site attended:* While any given intervention needs to have limits in terms of

programs and geography, actions and processes for the consolidation of a protected area should be based on a recognition of the interconnectedness of ecosystems, making it necessary to go beyond their physical boundaries. A large part of the threats and stresses comes from the areas of influence or from other political, social and economic sectors. For example, degradation of the upper part of watersheds lying outside reserve limits affects water quality and intensifies sedimentation in the Ibans and Brus pond systems. This poses the *need for actions at the site to be accompanied by policy influencing processes at all levels.*

- *It is essential to support not only short-term actions but also longer-lasting processes that transcend the life of the project, for both site consolidation and the institutional strengthening of local partner organizations. This suggests that there should be a plan for concrete intervention aimed at site consolidation, including actions to build the technical, logistical, administrative and financial capacities of local partner organizations. Here, long-term relationships should be promoted with partners, capitalizing on accumulated experiences to strengthen and provide continuity for work at the site and also to share it with others for a multiplier effect.*
- *Selection of a suitable local partner agency can ensure the success of the project and the sustainability of processes:* The partner's experience and qualifications and its openness to learning and adaptive management in the project are key factors for success in an intervention such as the PiP program.
- *Establishing a good system of communication between the site and the administrative offices is key to ensuring good project performance.*
- *The design of conservation and development programs in protected areas should take dimensions of gender, ethnicity and age into consideration:* This will help make interventions compatible with local dynamics and promote a comprehensive perspective that recognizes and values the contributions of each discipline and each culturally different group, whether due to gender, age or ethnicity. This poses the *need for integrating transdisciplinary groups to support consolidation processes in protected areas.*
- *Capacity building for local organizations is essential to broaden the base and mechanisms of social participation in conservation and development related to the site's consolidation.*
- *Lack of clarity concerning land ownership rights and centralized State management of goods of common use discourages community involvement in biodiversity conservation, in addition to encouraging speculation and advance of the agricultural frontier.*
- *It is necessary to rethink the traditional approach to protected area administration and explore co-management modalities in which organized communities participate not only in consultations but in decision making—in other words, with equal power and responsibility:* This promotes processes of administrative, financial, technical and policy decentralization, allowing communities to be actors as opposed to beneficiaries, as they are traditionally viewed.

Conclusion

It is evident that the PiP program in the Rio Platano Reserve made important contributions to the site's consolidation. Several tools and methodologies were

introduced that have increased local capacity to maintain the site's functionality as well as commitment to following up on the actions and processes supported. Its technical assistance, reinforcement and strengthening for actions already underway showed that PiP was an initiative that promoted local capacity, encouraged complementarity and contributed new elements others had not provided. This flexible design of adaptive learning created synergy and empowered the capacities of both the partner and other entities with similar ends at the site.

The Site Consolidation Scorecard turned out to be an effective tool, enabling yearly evaluations of the site's consolidation and generating elements to guide investment focused on weak, critical or strategic points for the site's functionality. Because the relevance of the indicators can change over time, it is necessary to be open to making adjustments in the process, and also to define the optimal scenarios attainable within a given period for each indicator applicable to the situation of the site. This would contribute to a more objective referent in scoring each indicator.

In summary, it can be stated that that the PiP program contributed effectively in efforts leading to the consolidation of the Rio Platano Biosphere Reserve and the heart of the Mesoamerican Biological Corridor (MBC), and created certain conditions for proposing the creation of the transboundary biosphere reserve.

It is clear that a site's level of consolidation is relative since it can be strengthened or weakened by internal and external changes. This poses the need to keep watch on social, economic, cultural, political, legal and institutional factors. If PiP support contributed to progress in creating the conditions for a functional reserve, currently much still remains to be done for definitive consolidation. In this task, experience, lessons learned and good practices derived from the PiP program should be capitalized to generate a multiplier effect, particularly in protected areas connected to the reserve and part of the Mesoamerican Biological Corridor, since their protection is vital for ensuring the long-term conservation of natural resources and biodiversity in the Rio Platano Biosphere Reserve.

There are many challenges and tasks still pending in the reserve, some of them too complex to resolve in the short term. This suggests the need to facilitate medium- and long-term processes such as the following:

- Resolve land tenure problems
- Halt advance of the agricultural frontier and illegal logging
- Establish and restore degraded systems, such as watersheds and other forest ecosystems
- Generate scientific information for conservation and development, complementing it with local popular knowledge
- Strengthen local organizations and mechanisms of social participation
- Develop co-management systems based on effective decentralization toward communities and the township
- Achieve effective implementation of management regulations for the different subzones, and complementarity between these regulations and the rights of communities
- Develop long-lasting, long-term financial mechanisms for the site
- Harmonize policies and laws and make sure they are applied
- Promote and strengthen compatible economic options with direct benefits for natural resource users
- Harmonize tools and methodologies for a consensually-reached monitoring system of biological elements and overall management in order to measure site consolidation

- Establish strategies in participatory form to promote stabilization of the population
- Strengthen surveillance and control systems, etc.

Despite the above, to date there has been significant progress in the creation of conditions necessary for continuing toward consolidation of the reserve and the Mesoamerican Biological Corridor. This will be possible to the degree that efforts, resources and institutional capacities are promoted, articulated, ordered, coordinated and accompanied in a respectful and horizontal manner that takes gender, ethnic and age differences into account.

Abbreviations and Acronyms

AFE-COHDEFOR	Administración Forestal del Estado-Corporación Hondureña de Desarrollo Forestal (State Forestry Administration-Honduran Corporation for Forestry Development)
CIL	Comité Interinstitucional Local (Local Inter-Institutional Committee)
COROB	Comité de Orientación Regional de la Biosfera (Regional Steering Committee for the Biosphere)
COZOB	Comité de Orientación Zonal de la Biosfera (Zone Steering Committee for the Biosphere)
DAPVS	Departamento de Areas Protegidas y Vida Silvestre (AFE-COHDEFOR) Department of Protected Areas and Wildlife (under AFE-COHDEFOR)
DIBIO	Dirección General de Biodiversidad General Division of Biodiversity
ETI	Equipo Técnico Interinstitucional (Inter-institutional Technical Team)
GTZ	Deutsche Gesellschaft für Technische Zusammenarbeit (German Technical Cooperation)
ILO	International Labour Organization
INA	Instituto Nacional Agrario (National Agrarian Institute)
MBC	Mesoamerican Biological Corridor
MOPAWI	Mosquitia Pawisa Apiska, Agencia para el Desarrollo de La Mosquitia (Mosquitia Pawisa Apiska, Mosquitia Development Agency)
ODECO	Organización de Desarrollo Étnico Comunitario (Organization for Community Ethnic Development)
PiP	Parks in Peril Program
PROARCA	Programa Ambiental Regional para Centroamérica (Regional Environmental Program for Central America)

SCP	Site Conservation Planning
TNC	The Nature Conservancy
UNESCO	United Nations Education, Science and Cultural Organization
USAID	United States Agency for International Development
USDOI	United States Department of the Interior
WWF-CARO	World Wildlife Fund, Central American Region

Bibliography

AFE-COHDEFOR. 2000. Plan de Manejo Reserva del Hombre y la Biosfera del Rio Platano. Editorial Guaymuras. Tegucigalpa, Honduras.

AFE-COHDEFOR –Proyecto Biosfera del Rio Platano. 2003. Programa de Monitoreo y Evaluación en la Reserva del Hombre y la Biosfera del Rio Platano. Technical document. Tegucigalpa, Honduras.

House, Paul, Adalberto Padilla, Osvaldo Munguía and Carlos Molinero. 2002. Diagnóstico Ambiental: Reserva del Hombre y la Biosfera del Rio Platano. Publication of MOPAWI, AFE-COHDEFOR, UNAH and TNC. Tegucigalpa, Honduras.

León, Patricia, 2001, Four Pillars of Financial Sustainability, Resources for Success series published by The Nature Conservancy, Arlington, Virginia, U.S.A.

MOPAWI. 2002. Reporte de Consolidación del Programa de Parques en Peligro en la Reserva del Hombre y la Biosfera del Rio Platano. Technical document. Tegucigalpa, Honduras.

MOPAWI. 1998. Reporte de Auto Evaluación FY 1998/Plan de Trabajo FY 1999 del Programa de Parques en Peligro en la Reserva del Hombre y la Biosfera del Rio Platano. Technical document. Tegucigalpa, Honduras.

MOPAWI. 1999. Reporte de Auto Evaluación FY 1999/Plan de Trabajo FY 2000 del Programa de Parques en Peligro en la Reserva del Hombre y la Biosfera del Rio Platano. Technical document. Tegucigalpa, Honduras.

MOPAWI. 2000 a. Reporte de Auto Evaluación FY 2000/Plan de Trabajo FY 2001 del Programa de Parques en Peligro en la Reserva del Hombre y la Biosfera del Rio Platano. Technical document. Tegucigalpa, Honduras.

MOPAWI. 2000 b. Comentarios sobre el Análisis del Scorecard de Consolidación de la Reserva del Hombre y la Biosfera del Rio Platano. Technical document. Tegucigalpa, Honduras.

PROARCA/CAPAS-CCAD-USAID. 1997. Primera Sesión de Monitoreo de la Reserva del Hombre y la Biosfera del Rio Platano. Technical working document. Palacios, Gracias a Dios, Honduras.

PROARCA/CAPAS-CCAD-USAID. S/f. Formulario de Reporte de Campo de Monitoreo de Areas Protegidas. Technical work document. Guatemala City, Guatemala.

Sánchez, Alex Hitz, et al. 1997. Rumbo al Éxito: Una guía para juntas directivas de organizaciones sin fines de lucro, published by The Nature Conservancy, Arlington, Virginia, U.S.A,

The Nature Conservancy. 1993, Resources for Success: A Manual for Conservation Organizations in Latin America and the Caribbean, Arlington, Virginia, U.S.A.

The Nature Conservancy. 2000. The 5-S Framework for Site Conservation: A Practitioner's Handbook for Site Conservation Planning and Measuring Conservation Success, second edition, Arlington, Virginia, U.S.A.

The Parks in Peril (PiP) Program began in 1990 as an emergency effort to safeguard the most imperiled natural ecosystems, ecological communities and species in the Latin American and Caribbean region. With U.S. Agency for International Development (USAID) funding administered by The Nature Conservancy (TNC), PiP has worked through 30 non-governmental partner organizations to shepherd a collaborative effort with government agencies and stakeholders to consolidate the technical, human and financial resources necessary to sustain conservation of these sites into the future. By 2002, PiP had fostered protection, management, financing, and local support of 37 protected areas in 15 countries, covering 11.4 million hectares.

To substantiate and illustrate lessons learned and recommendations about the progress made towards consolidation of PiP sites from 1990 to 2002, ten case studies were developed by TNC staff and partners. This document presents one of these case studies.

This document was made possible through support provided by the Office of Regional Sustainable Development Bureau for Latin America and the Caribbean, USAID, under the terms of Award No. EDG-A-00-01-00023-00 for the Parks in Peril Program. The opinions expressed herein are those of the author(s) and do not necessarily reflect the views of USAID.