

IMPLEMENTATION COMPLETION REPORT

Region: LAC

Country: Guatemala

Project ID:P057031

Grant No. TF022863

GEF Medium-Size Project:

**Support for the Management And Protection Of
Laguna Del Tigre National Park And Biotope Project**

September 16, 2002

Central America Country Managing Unit
Environmentally and Socially Sustainable Development Sector Unit
Latin America and the Caribbean Region
The World Bank Group

Table of Contents

I. BASIC DATA	1
II. PROJECT IMPACT ANALYSIS	4
III. SUMMARY OF MAIN LESSONS LEARNED	17
IV. FINANCIAL MANAGEMENT STATUS	21

GEF MSP IMPLEMENTATION COMPLETION REPORT (ICR)

I. BASIC DATA

(1) **Date of Completion Report:** September 2002.

(2) **Project Title:**

Management and Protection of Laguna del Tigre National Park and Biotope
Petén, Guatemala, TF022863.

(3) **GEF MSP Allocation:** \$ 722,631

(4) **Grant Recipient/Main Contact:**

Propetén-Conservation International
Guatemala / Carlos Soza

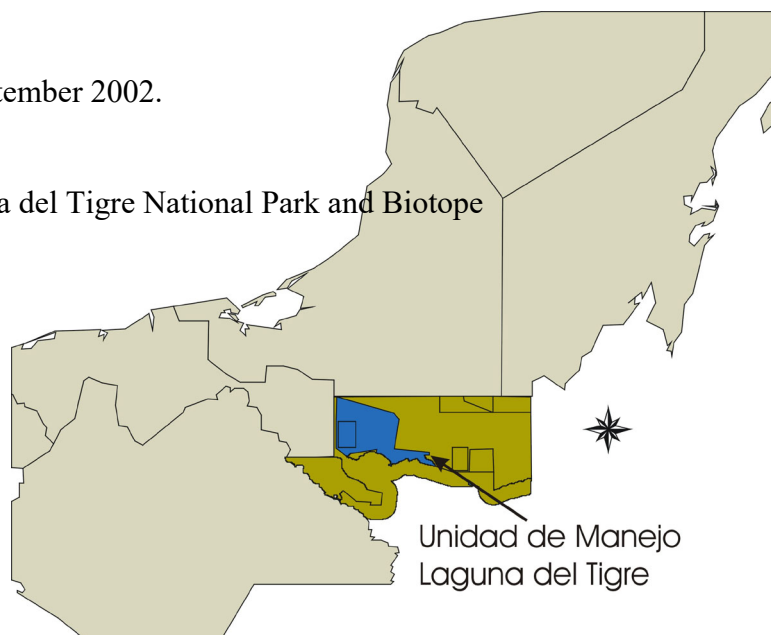
(5) **Execution Date:**

October 1999 - March 2002

(6) **World Bank Task Manager:**

Douglas J. Graham / Armando E. Guzmán

(7) **Goals and Objectives of the MSP grant** (including any changes in the objectives and components of the grant as compared to the original approved MSP)



Laguna del Tigre National Park (LTNP), comprising 338,002 ha¹, is located in the central part of the Selva Maya (Maya Forest). The Maya Forest is a tropical dry ecosystem that extends from southern Mexico to the northern parts of Guatemala and Belize. The LTNP, part of the Maya Biosphere Reserve (MBR) is the largest protected area within the Maya Forest, and is characterized by seasonal lakes and plains. In 1990 the RAMSAR convention declared the wetlands of the LTNP as “Wetlands of International Importance,” and in 1999 the entire 338,002 ha were declared an area of ecological importance.

The eastern part of LTNP contains high forest which gradually becomes an ecological mosaic until it reaches the western part of the Park which has seasonally flooded areas that characterize wetlands. High riparian forests and reed swamps (sibales) surround bodies of water throughout the Park. The San Pedro River is the largest river in the area and comprises the southern boundary of the Park. The San Pedro is a tributary of the Usumacinta River, which is the largest river in all of Central America and the heart of the Maya Forest.

In spite of the biological importance of the LTNP, since 1998 management of the area has been precarious, largely due the lack of participation on the part of several actors involved in the management process. The negative results of this situation can be seen in the accelerated degradation of the ecosystem. Social, agricultural and ranching pressures and petroleum

¹ Congressional Decree 5-90, 1990, which created the LTNP also included the Laguna del Tigre Biotope, which has been placed under the administration of the University of San Carlos, Guatemala.

extraction within the LTNP have contributed and continue to contribute to the loss of natural habitat, as is evident in the rate of deforestation which, in 1997, was the greatest in all of the MBR.

According to the MSP Brief “*The goal of this project is to conserve the biodiversity and natural habitats of Laguna del Tigre National Park and Biotopo, the largest core zone in Guatemala’s protected areas system. This goal coincides with that of the Guatemalan government, as articulated in the 1999-2003 Master Plan for the Laguna del Tigre Management Unit (CONAP 1998).* The objectives and components of the project, set forth in the original plan, have not changed. The indicator of the aim and goal also has remained the same, as is noted immediately below.

It is estimated that during the period of the project, the rate of deforestation in Laguna del Tigre dropped more than 50%, from a rate of 0.57% in 1997 to a rate of 0.25% in 2001 (Ramos et al 2001). The 2001 rate was lower than the rate of deforestation - 0.32% - for the MBR as a whole. This decline in the rate of deforestation in Laguna del Tigre fulfills the general goal of the project. The rate of deforestation in the MBR as a whole has declined since 1997, and this is because the deforestation rate fell in several areas including that of Laguna del Tigre. (See Annex 5. Estimation of deforestation rates in the Maya Biosphere Reserve for the Periods of 1997-2000, 2000-2001.)

Year		MBR	LTNP
1997	Beginning MSP	0.36%	0.57%
2001	End MSP	0.32%	0.25%

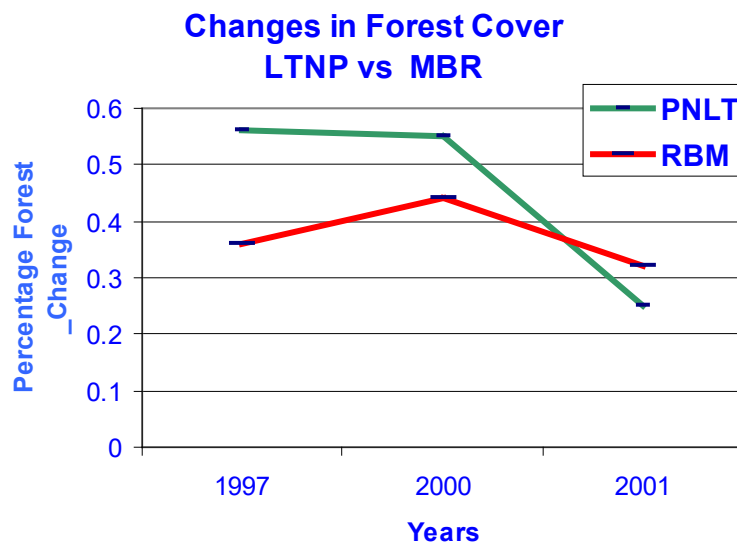


Figure 1: Deforestation within LTNP, including Community Management Units, is lower than elsewhere in the MBR. Note that the trend of the Park to have the highest rate of deforestation has been reversed.

(8) Financial/Budget Information. Describe any changes from original financing plan (changes in co-financing or GEF-financing): Table with key components (initial and final allocations).

Table 2. Summary of Use of GEF Funds (US\$)			
Project component	Planned	Actual	Variation
A. Environmentally sound economic and agricultural alternatives introduced	25,850	20,018	(5,832)
B. Community and municipal organizations within Laguna del Tigre strengthened	56,925	51,086	(5,839)
C. Environmentally education and conservation awareness programs established and operational.	61,325	42,948	(18,377)
D. NGO capacities for Laguna del Tigre co-management strengthened.	39,875	74,547	34,672
E. Government Laguna del Tigre Management system reinforced.	237,600	199,188	(38,412)
F. Changes in ecosystem health, socio-economic conditions in Laguna del Tigre documented and disseminated, and institutional arrangements assessed.	206,800	250,232	43,432
G. Project Coordination and Management	94,256	84,612	(9,644)
Total	722,631	722,631	0

The variations noted in the third column of the above table were necessitated by events and changes that occurred during the course of the project. These include the cancellation of the co-management contract between the government of Guatemala and a NGO that had been administrator of the Park, and the decision of the Government to assume direct administration of it. This led to project revisions in its final phase, based on the work plans of the new (Government) administration of the LTNP and hence it was necessary to effect changes based on identified priorities.

Project component	GEF	USAID	Other Funding	TOTAL
A. Environmentally sound economic and agricultural alternatives introduced	20,018	79,056	29,524	128,598
B. Community and municipal organizations within Laguna del Tigre Strengthened	51,086	21,170	6,639	78,895
C. Environmentally education and conservation awareness programs established and operational.	42,948	13,489	43,249	99,686
D. NGO capacities for Laguna del Tigre co-management strengthened.	74,547	7,412	19,661	101,620
E. Government Laguna del Tigre Management system reinforced.	199,188	119,219	31,953	350,360
F. Changes in ecosystem health, socio-economic conditions in Laguna del Tigre documented and disseminated, and institutional arrangements assessed.	250,232	93,901	119,798	463,931
G. Project Coordination and Management	84,612	436,112	65,938	586,662
TOTAL	722,631	770,359	316,762	1,809,752

II. PROJECT IMPACT ANALYSIS

(9) Project Impacts: (Describe to what extent the objectives have been met and whether the performance indicators have been achieved).

At the conclusion of the implementation of the Project “Support for the Management and Protection of Laguna del Tigre National Park and Biotope,” we can affirm that the initial conditions found in LTNP have substantially changed in a positive direction:

- The rate of deforestation has declined to 0.25% from 0.56%
- Through participatory mechanisms, key actors have been integrated in the conservation effort, and a permanent LTNP Support Committee has been instituted, having among its most important goals the search for sustainable financing of the Park.
- The presence of CONAP (National Council of Protected Areas), CECON (Center for Conservationist Studies) and the municipal government of San Andrés in the Park are much stronger since the initiation of the Project.

- Led by CONAP, a functioning administration with infrastructure, equipment, trained personal and a budget assigned by the Government of Guatemala to CONAP has been established.

Nevertheless, a factor that calls for special attention is migration into the Park, which despite the fact that it has declined by 60% still continues. The Government of Guatemala signed an agreement with thirteen communities in the Park, and ProPetén/CI worked with two of them (Paso Caballos and Buen Samaritano) on activities described below.

9.1 Describe to what extent the objectives have been met (the following description is presented per project components).

A) Environmentally sound economic and agricultural alternatives introduced to Laguna Del Tigre communities.



Community of Paso Caballos (2002) and watershed of the San Pedro River.

CONAP has appointed NGO accompaniers for each of the 13 communities in the LTNP with which CONAP has signed contractual agreements, and the MSP has worked with two of them (Paso Caballos, Buen Samaritano), as demonstration sites for CONAP and the other NGOs in the area. The management units of Paso Caballos and Buen Samaritano have been stabilized with respect to the number of families in their respective management units, and 100% of the families in both

communities have prepared land plans which have been accepted by CONAP, this being the essential step for the adoption of agroforestry techniques within each land parcel. Thus, in Paso Caballos at least 25 families are now implementing agroforestry techniques on their parcels, and an additional 10 families have adopted family gardens which include medicinal plants. Among the economic alternatives, 10 families have become part of a local tourism committee and have decided to dedicate 100% of their time to the activity. Another 22 families are indirect beneficiaries of tourism activities.

The above demonstrates that it is feasible to implement these models, and they have now become alternatives that help decrease the rate of deforestation and the incidence of forest fires in the communities of Paso Caballos and Buen Samaritano, thereby permitting and promoting the conservation of ecosystems.

B) Community and municipal organizations within Laguna del Tigre strengthened.

The municipality of San Andrés has become involved with the management of protected areas found within its jurisdiction, and the strengthening of the municipal environmental department has been of critical importance in this process. The municipality now coordinates the program for the control and

prevention of forest fires in the LTNP. For the first time in the history of Petén in general, a municipal Environmental and Natural Resources Commission has been created. In 2001 the Forest Fire Committee of the Municipality of San Andrés has established agreements concerning prevention and combating forest fires with 100% of the LTNP communities.



People of the communities working in agroforestry techniques.

Now, the LTNP has a program for the control and prevention of forest fires that includes the Forest Fire Commissions in each of the communities, the municipality and the Departmental Forest Fire Commission. These efforts have been consolidated with the participation of the municipality in the LTNP Support Committee (see annex 3).

C) Environmental education and conservation awareness programs established and operating.

Educational information and materials have been created through and by the LTNP project, including at least three publications directly dealing with Environmental Education as well as other technical publications (see annex 1-Publications). The project also permitted the wide dissemination of other valuable materials, such the AquaRAP (a study of aquatic ecosystem) directed to decision makers and the general public. The inclusion of



Student attending an environmental education activity at Paso Caballos Community

environmental educational themes in the daily school curriculum perhaps has been the single greatest success of the Project with respect to Environmental Education.

Public schools located within the LTNP are included in an environmental education pilot project which is part of an educational reform process being conducted throughout Petén. The hope is that the environmental educational reform program will be officially recognized by the Government of Guatemala and become an integral part of the curriculum in all the schools in Petén. Similarly, scientific studies with the communities of Paso Caballos and Buen Samaritano have been widely disseminated (See annex 1 – Publications, “Paso Caballos”).

D) NGO capacities for Laguna del Tigre co-management strengthened.

The complexities in LTNP (petroleum activities, land invasions, transport of illegal migrants, the proximity of the border with Mexico, social pressures, etc.) has demonstrated that one single organization faces many limits on its ability to

administer the Park in an effective manner, and the participation of several different actors is necessary to achieve successful management. The above complex circumstances made it impossible for the Canank'ax NGO to be successful and forcing its withdrawal from the field of conservation, the end result of which was to redirect this part of the project to CONAP and CECON.

Based on the above, several actors decided to form the “Support Committee for the Laguna del Tigre National Park.”² The Committee membership is made up of institutions which have interests in the area and, moreover, have worked for the conservation of the Park. Committee actions and work plans as well as Committee meetings are based on the LTNP strategy. CONAP has recognized the Committee as an advisory group for “Laguna del Tigre” matters. The issue of long-term financial stability for “Laguna del Tigre” makes clear the need for a much greater investment of time and effort in the median-run, because many short-term efforts have not been able to achieve desired goals, albeit establishing contacts that in the median-term can or could bring interesting results for “Laguna del Tigre.”

E) CONAP's Laguna del Tigre management system reinforced.

One of the great achievements of the MSP is that at long last the LTNP has a functioning administrative system, with headquarters in the LTNP, a director, administrator, forest rangers, equipment and infrastructure. But the most important thing is that the Government of Guatemala has assigned an annual budget for its operations, via CONAP. Note that the LTNP now has a key infrastructure for management of the area, that is, eight (8) control and vigilance posts and three (3) strategically located and well-equipped biological monitoring posts. Similarly, all the personnel of the LTNP have been equipped, thereby achieving improvement in their field work operations. CONAP has budgeted and signed contracts for 40 forest rangers, and also contracts for temporary personnel during the forest-fire season. This is in addition to the regular technical personnel in LTNP.

The “Guacamayas” (Scarlett Macaw) Biological Station is recognized as the main center for scientific studies and training in the Maya Biosphere Reserve. The Station has a training center staffed by 60 people and is the base for training CONAP personnel, communities, teachers and other organized groups within and outside the LTNP and the entire MBR. The Station has taken the lead in establishing a network of such stations in the region, and has signed agreements with the “Santa Lucia” Biological Station in Alta Verapaz, Guatemala and with “Los Guatuzos” Ecological Center in Rio San Juan, Nicaragua.

² Center for Conservationist Studies (Centro de Estudios Conservacionistas)-CECON
National Council of Protected Areas (Consejo Nacional de Areas Protegidas)-CONAP
Conservation International/ProPetén (Conservación Internacional/ ProPetén)-PROPETÉN
Municipality of San Andrés, Peten (Municipalidad de San Andrés, Petén)
Project for Institutional Strengthening for Environmental Policy (Proyecto de Fortalecimiento
Institucional en Políticas Ambientales) – EPIQ AIR/IRG
The Nature Conservancy of Guatemala - TNC

Training at the “Guacamayas” Biological Station was an essential part of the work in the area, and will continue to be vital in the long-run. To date, the 47 primary school teachers working in the LTNP have been trained, and this has a direct impact on the 700 students living in the Park. The children now receive an environmental education as an integral part of their entire curriculum. In addition, the course on “Agroforestry Promoters” executed in agreement with the University Center of Petén (Centro Universitario de Peten, CUDEP) has graduated at least 50 people from the communities, and the course is now in its third edition. ProPetén offers training for “Agroforestry Promoters” as part of its work for the newly established Support Committee for LTNP. In accord with the training plan created for the Park, the personnel of the LTNP, including all the CONAP forest rangers continue to take the agroforestry promoters training at “Las Guacamayas” Biological Station.



One of the buildings at the “Las Guacamayas” Biological Station.

F) Changes in ecosystem health and socioeconomic conditions in Laguna del Tigre documented and findings disseminated to managers and key stakeholders, and LTNP/Project administration monitored and evaluated.

In 2001 a social monitoring study focused on the analysis of threats to the ecological integrity of Laguna del Tigre was carried out. Although the study documented an increased number of people in the Park, the study also found a 66% reduction in the rate of migration into the Park, and a major finding was that the institutional recognition of CONAP is now much stronger than it was before the project began (before the project began, it was extremely dangerous to be identified as a member of CONAP, however, now CONAP personnel and the communities can enter dialogues on issues of common interest). The communities of Paso Caballos and Buen Samaritano have become pioneers in the management of land regularization plans, and they have established an example for other communities to follow as they attempt to manage their residence in the area in accord with the policy of human settlement within protected areas.

In the case of biological investigations, at least 4 important management studies have been carried out, two of them concerning aquatic systems (water quality and pressure on fish). These studies have made it possible to adopt management methods for the largest fresh water wetlands in Central America. Another valuable aspect of these studies is that they have become the basis for environmental education documents and materials.

Now, there is ecological and socioeconomic information on the LTNP which enables adequate management decision. The reinforcement of the capacity for investigation in the area has created the conditions for continuing to generate data and analyses which can help guarantee sound management of the area.

9.2 Achievement of Performance Indicators.

Table 4. Effectiveness Indicators Comparative Table	
Planned	Current Status
Laguna del Tigre “consolidation criteria” (sufficiency of infrastructure, personnel, training, land tenure, threats analysis, zoning, management planning, research and monitoring, long-term financial stability, local participation and support, etc.) improved versus a January 1999 baseline.	During the execution of the MSP, the Park obtained its own administration which was established within the Park itself. The administration has its central offices in El Tigrillo, located in the western part of the LTPN. In addition, the Park now has eight control and vigilance posts, three control towers which constitute a permanent system for controlling and preventing forest fires, a detailed plan for biological and socioeconomic monitoring and evaluation which are organized through three monitoring posts located at strategic points within the Park and which permit continuous monitoring of indicator species and which allow for the participation of key actors. There also is an on-going training for human resources, and the administrative leadership of CONAP is recognized and accepted throughout the Park. The Paso Caballos and Buen Samaritano management units have land regularization plans that are now being implemented. There are also plans for biological and social evaluations of these areas.
Laguna del Tigre Management Committee formally established and meeting on a regular basis to coordinate activities.	Given the fact that the Government of Guatemala, acting through CONAP, took over the administration of the LTNP after the failed attempt of a NGO to do so, there was a good deal of uncertainty about what would happen when the MSP ended. However, as a result of this concern and the activities of the MSP, all the actors working within the frame of the MSP were motivated to and participated in the formation of the “Support Committee for the Management of Laguna del Tigre.”

Table 4. Effectiveness Indicators Comparative Table	
Planned	Current Status
	Seven organizations from different sectors sit on the Committee. These organizations have a formal, signed accord (see Annex 3-Signed Accord), and meet regularly to coordinate activities based on the LTNP strategy (See Annex 6 LTNP Strategy).
At least three communities adopt formal management plans for their management units by the first quarter of 2000. First phase of management plans being implemented by first quarter of 2001.	The project worked with the communities of Paso Caballos and Buen Samaritano, which have adopted management plans for their respective management units. Upon initiating the management of the areas, in the first trimester of 2000 plans for land regularization were submitted to CONAP and are being implemented. It is important to underline that a short three years ago these communities actively and aggressively opposed all conservation projects and support for LTNP, but through MSP efforts they have turned around and have been successfully integrated into the management plans and programs. These communities are actively participating in the training programs carried out at the “Las Guacamayas” Biological Station and recognize the importance of conserving endemic species, particularly <i>the Ara macao</i> (Scarlett Macaw), thereby creating a model for community participation in conservation efforts. These successful efforts have received international recognition, and the project was awarded an international prize – “People and Environment” – awarded by the English Whitley Foundation. The award was presented personally by Princess Ana to the director of the project, Licenciado Carlos Soza Manzanero in London in April of this year. The award brought with it US\$37,000 which permitted the consolidation of community work being carried out by ProPetén as a follow-up to the MSP.
At least three governmental institutions of NGOs have formal agreements with the	The Project promoted the creation of the Environmental and Natural Resources

Table 4. Effectiveness Indicators Comparative Table	
Planned	Current Status
Laguna del Tigre administration and are working actively to support implementation of the Laguna del Tigre master plan by the second quarter of 2001.	<p>Commission of the Municipality of San Andrés which works to implement the Master Plan and which has established formal agreements throughout the entire municipality to implement plans to control and prevent forest fires.</p> <p>In 2002 a formal trinational agreement (“Guacamayas Without Frontiers”) was signed to protect the Scarlett Macaw. This initiative, which originated in Guatemala, involves Mexican, Belizean and Guatemalan organizations in the Maya Forest (Selva Maya).</p> <p>In 2001 all the environmental education efforts and concrete results in the LTNP created a good deal of interest throughout all of Petén. This led to the creation of the InterInstitutional Commission for Furthering Environmental Education (CISEA) which is currently promoting a pilot plan for environmental education at the level of the department and which involves 25 organizations, including the Ministry of Education. The relevant formal agreement was approved by the Ministry of Education.</p>
NGO contributions represent at least 25% of the total investment in Laguna del Tigre Management by the second quarter of 2001	The several organizations working within LTNP have contributed 38% of costs for management of the area in 2001.
The Environmental Commission of the municipality of San Andrés establishes at least four formal agreements with communities in the Park that commit those communities to aid in its management and conservation.	<p>The MSP promoted the formation of the Environmental and Natural Resources Commission of the Municipality of San Andrés, and between 1999 and 2000 the Commission reached formal agreements with 100% of the communities in the LTNP (13 communities).</p> <p>This innovative effort is unique in Petén and has created space for the participation of municipalities in conservation which had not been acknowledged or permitted previously. Thus, the MSP has created, for the first time, real interest on the part of the municipalities in Petén in the theme of environmental conservation.</p>

Table 4. Effectiveness Indicators Comparative Table	
Planned	Current Status
<p>The proportion of cultivated land within Community Management Units under improved management practices increases significantly over the course of the project, compared with a 1998 baseline.</p>	<p>The amount of cultivated land now under alternative management compared to the 1998 baseline is obvious, because in 1998 there were no family management units managing their soils and there were no agroforestry plots.</p> <p>The proportion of land now found under management within the Community Management Units has continually and significantly increased over the course of the project. With respect to 1998, a 100% increase in the areas of Paso Caballos and Buen Samaritano are now under improved management, and plans for land regularization which defines and zones household plots for cultivation has been executed.</p> <p>Plans for improved community management are being implemented and consist of the following programs</p> <ul style="list-style-type: none"> a) agroforestry b) rational organization of household plots c) community reserve areas d) norms and rules about the use of natural resources e) promotion of low-impact tourism f) continual search for economic alternatives, and g) environmental awareness
<p>Children in Laguna del Tigre have greater access to environmental education programs.</p>	<p>The MSP has adopted two mechanisms (formal and non-formal) for environmental education, and by means of these 100% of children in the LTNP schools are integrated in programs of environmental education, with contents and materials appropriate to the region (See Annex 1-Publications). The MSP also has created a non-formal program of environmental education directed to the entire population of the Park.</p> <p>All the schools within LTNP have integrated programs of environmental education in their educational plans and</p>

Table 4. Effectiveness Indicators Comparative Table	
Planned	Current Status
	programs. Adding to this effort, a pilot plan for environmental education is now in its final phase. The Ministry of Education has promoted the pilot plan not only with the LTNP but also throughout the entire department of Petén.
150 households in Paso Caballos, Buen Samaritano and Mirador Chocop adopt improved agroforestry techniques.	In addition to the fact that all the households of Paso Caballos and Buen Samaritano have incorporated agroforestry techniques into the management of the farm plots as a condition established in the agreements they signed with the Government of Guatemala, and as set forth in their management plans, 50 individuals, both men and women, have been trained at the “Las Guacamayas” Biological Station in a program for the promotion of agroforestry. The promoters are now engaged in supporting conservation programs and improved management of the TLNP.
At least 75 households in Laguna del Tigre communities participate in an integrated health and conservation project to include: medicinal plants, preventative and curative health care, improved nutrition and environmental sanitation. These families should demonstrate an improved understanding of the linkage between conservation and health.	The Mobile Biosphere program is dedicated to community outreach and extension, focusing on the themes of health and environment. Its efforts have been concentrated on the communities of Paso Caballos and Buen Samaritano. Fifty (50) families in each community have been involved in these activities. This is an innovative multidisciplinary program which focuses on and links the themes of health, environmental education, organic agriculture and nutrition. The methodology used is based on an interactive model with emphasis on play activities, which has generated much interest and a very high level of participation in the communities.

(10) Project Sustainability: Provide an assessment of the approach taken to influence continuation of project benefits after completion of project implementation; assess likelihood of project sustainability and key factors/conditions needed for this.

Given the importance of continuity and follow-up of conservation and ecosystem management's efforts for LTPN, the participation of all stakeholders has been cultivated and supported; the roles of the Municipality, the Center for Conservation of the University of San Carlos Guatemala and all the other actors who comprise the LTNP Support Committee³ have been strengthened. Thus, the conditions and factors for on-going team-work and goal-attainment for conservation of the LTNP have been created.

(11) Replicability: Describe the approach taken; assessment of likelihood of replication; targeted stakeholders for replication; and description of any evidence that replication is likely.

The work carried out by the LTNP project and the conditions under which it was carried out, such as an unstable political climate, conflicts over land, consequences of the signing of the Peace Accords, and social problems with communities, have provided lessons that raise interesting, specific points that are worthy of replication. These include, among other things, development work with the communities of Paso Caballos and Buen Samaritano, the program of environmental education, the incorporation of the Municipality in environmental conservation, and the great importance of socioeconomic evaluations. Some evidence indicates that methods used in this project are being replicated, for example, the environmental pilot program being conducted throughout Petén, the increasing participation of the municipalities outside the MBR in programs of conservation, and the increasing number of private organizations that are adopting a conservation through "Alianza Verde" (an association of regional and community tourism enterprises).

(12) Stakeholder Involvement: Describe the approach taken for stakeholder involvement and adjustments to the approach; and any lessons learned from this approach.

In the complex circumstances in which the MSP was carried out, it was necessary to double efforts to find way to gain the participation and consensus and, more than anything else, to arouse the interest of all the stakeholders to assure realization of conservation goals for the Park over the long-run. For much of this, the starting point was the establishment of formal links between the National Council of Protected Areas (CONAP) and the Municipality of San Andrés, Petén. This opened the doors for coordination of activities among the communities of the LTNP, all of which fall within the municipal jurisdiction of San Andrés. Throughout the course of the MSP we have learned that local municipal government has a great capacity to mobilize the efforts of the people within its territorial jurisdiction, and also that the prior close links between ProPetén and the municipal government of San Andrés made it feasible and possible to foment formal ties between the municipality and CONAP. This move also aroused the interest of all the other actors, the final result of which was the creation of a task force which has involved the active participation of all stakeholders.

³ Committee established in 2002. See annex. 3

(13) Special Project Circumstances (optional): Provide an overview of the relevant economic, financial, social, institutional and environmental conditions that may have influenced project implementation. Identify main factors affecting implementation and outcomes distinguishing those within and outside control of the recipient.

A factor outside the control of the recipient has to do with changes in local and national economic or financial conditions, such as increases in minimum wages, costs of inputs and so on. In other words GEF grants are not indexed, and this may occasion difficulties in the course of a multi-year project. In the present MSP, this was not a major problem.

Also, in the course of the MSP there was a need to realign certain activities, which resulted in variations, as noted elsewhere. Although this was outside the control of the recipient, the flexibility of the WB as the GEF implementing agency and the understanding of their managers made it possible to cope with the problem.

The social problems, almost all of them outside local recipient control, include:

- the initial top-down decision to create protected areas in Petén without informing much less consulting with local authorities and stakeholders,
- the implications of a 500 year-old struggle for land compounded by ethnic inequalities,
- the implications of the Peace Accords as understood by peasants seeking land,
- the mistrust of government institutions generated by the 36-year internal civil war,
- the influence of powerful petroleum and cattle ranching interests on events within and outside the protected areas, and
- the organized criminal activity in and around the LTNP.

To cope with these complex and interrelated problems, the MSP had to invest much energy and time upfront to develop ways of promoting popular stakeholder participation in the management and conservation of LTNP, and, in particular, clearing the way for the participation of the relevant municipality (San Andrés) in mobilizing local group action in favor of conservation of natural resources and cooperation with CONAP. ProPetén's prior and on-going relationship with the municipality was invaluable for this work and has had an excellent and positive impact on conservation activities within and around LTNP.

On the institutional side there have been three major problems. First, CONAP is under the President's office (and not under the Ministry of Environment and Natural Resources) and initially all decisions were made in CONAP headquarters in Guatemala City, that is, far from Petén. To some degree, this remains a problem. Second, there was little coordination among the various stakeholders, governmental institutions and NGOs active in the LTNP. Third, the failure of the initial comanagement arrangement (Canan'kax and CONAP). Although these circumstances were outside the control of the recipient, the recipient was able to promote actions to overcome many of these problems, for example, the creation of the Support Committee for LTNP which helps coordinate interinstitutional plans and activities, the inclusion of the municipality of San Andrés in

plans to manage and conserve natural resources, and to mobilize community action in favor of the LTNP, and other positive activities.

The problem of building trust between the recipient and the municipality of San Andrés and communities within the LTNP (particularly Paso Caballos and Buen Samaritano) was partly within the control of the recipient, and here the recipient has been able to effect a good deal of success, with positive results for management and conservation of the LTNP, including an environmental education program that has had an impact on the entire department of Petén (and may have an impact on all of Guatemala), improved agrarian productive techniques in local communities, and so on, as noted elsewhere in this report.

In more general terms, the capacity of the recipient to promote and institute participatory processes among all the stakeholders, including communities, municipal government and other institutions, and the mutual understanding achieved between WB managers and the recipient have been crucial to project success.

(14) Institutional Capacity/Partner Assessment (optional): Evaluate the implementing agency's performance during the preparation and implementation of the project, with an emphasis on lessons learned that could be relevant for the future; evaluate the Bank and other co-financier's performance including their Management and Evaluation tools; and present any assessment(s) or comments from co-financiers and other project partners.

During execution of the project it became clear that the GEF financing lent greater credibility to the project at the local level. Also the results of the project became more visible and tangible due to the GEF's focus on results through regular monitoring.

- (a) ProPetén's cooperation with WB missions, constant communication and coordination with WB staff, as well as the expertise of the WB staff provided the local team with the opportunity to keep on attending the many and varied challenges that constantly came up and, at the same time, permitted us to develop and institute local capacity for dealing with those challenges. Perhaps the lesson here is that continual, open communication between WB staff and the NGO enhances chances for project success. Moreover, and in this specific case, the willingness of the WB staff to learn from the local team proved invaluable.
- (b) It is necessary to mention that for this type of project, there must be strong efforts to coordinate activities with governmental counterparts; otherwise it is almost impossible to accomplish the desired impact and results. Too often, too many organizations are isolated in their projects or specific activities, and interinstitutional coordination is not taken into account. In the project under discussion, the role of the Municipality and of the National Council for Protected Areas (CONAP) was critical. But, given the complex circumstances found in Guatemala and Petén, the WB also has to be flexible with respect to priorities, revisions and variations that become necessary during the course of a project. In short, the WB has to be willing to effect changes and make adaptations to dynamic situations during the course of implementing a project. In the case of this project, the WB and its staff

demonstrated the needed flexibility, and it was possible to reach agreements concerning variations with the WB.

- (c) During the course of this project, it became clear that the MSPs are important and are truly able to confront needs that the large multilateral funds do not see and too often omit, so that in the majority of cases their efforts are diluted without really coming to terms with grassroots groups and the concrete benefits they require. In other words, the size and management of the MSPs by their nature permit project implementers to confront local-level realities and needs in a way that large multilateral funds may find difficult to do. The MSPs also allow WB staff to build close, effective relationships with NGOs and local groups that large multilateral funded projects may find more difficult to realize.

III. SUMMARY OF MAIN LESSONS LEARNED

The role of the municipalities

The municipalities are covered by their own laws, that is, the Municipal Code, Congressional Decree No. 58-88, which code specifies that municipalities have jurisdiction over all developments within the municipal territory. Hence, the creation of protected areas and granting CONAP administration of these areas was perceived initially as a problem of Overlapping jurisdiction. Moreover, there are great differences between municipal and central government policies and work plans which create spaces between the two. Thus, it takes a great deal of detailed, careful work to align both municipal authorities and CONAP. In the end, we have shown that there is no overlap or contradiction between the mandates of both institutions but rather the need for genuine coordination. To this end, the MSP helped promote the creation of an Environmental Commission in the municipality of San Andrés with local (village) environmental commissions in each of the villages in Laguna del Tigre National Park, helped develop work plans for the Environmental Commission, and promoted the membership of the municipality on the Support Committee for conservation of the LTNP.

- It has been shown that it is possible for municipalities to participate actively and genuinely in management and conservation activities in protected areas.
- Management and conservation of protected areas is enhanced by participation of local government.
- Local government is more capable of mobilizing local (village) efforts for conservation than central government agencies.

Participatory processes

One of the lessons derived from the project is that:

- In situations where there are so many dissimilar interests that generate conflict, decisions cannot be unilaterally imposed.
- Prior to making any decisions, no matter how wise the decisions themselves may be, local authorities and communities must be informed about and persuaded that the decisions are wise and benefit them.

The initial rejection of CONAP reached the point where it endangered the life of CONAP field staff and the destruction of CONAP infrastructure. Conversely, when the process of participation and popular consultation was instituted, the effort produced a lessening of tension and thus better opportunities for management and negotiation. Now there is participation at all levels, including the LTNP support committee formed to guarantee park management over the long-run. This has been one of the great accomplishments produced by the MSP.

Levels of education and community enterprises

The Paso Caballos tourism committee is made up of seven (7) people, but only three of the members are able to speak, read and write in Spanish. The Project has worked with them for three years, and they now have an solid organization and the basic infrastructure to engage in low-impact tourism activities and generate employment and income within and for the community. However, training in accounting and delivery of services to clients needs to be strengthened so that the committee learns more about the tourism industry, the role of the tourism committee and how to put into practice business management principles.

- In order to develop community-based tourism enterprises, those directly in contact with the public must speak, read and write in Spanish.
- In addition, there should be on-going training courses to continue to build knowledge and skill which will permit them to enhance their organization, provide quality service, administer income and take effective business decisions. Without such on-going training, it would be necessary to invest more time and resources in the formative processes, and there would be less assurance of success.

The lack of a sense of community and difficulties in reaching shared objective and conservation:

A sense of permanency and group spirit are two vital elements in reaching community goals, and their lack weakens social cohesion and generates problems. The settlement along the shores of the Chocop River in the LTNP is an example of this. The colonists came here only because they were searching for land, that is, the only thing that unites them is the common need for land, but they have no other shared need or sentiment. As a result of this, they were unable to form a plan for regularization of their resources on a group basis, as demanded by CONAP. Instead, there were internal disputes over land, and the conflict grew in severity and resulted in three deaths in 1999 and the increasing atomization of the “community.” At this moment, the settlers are unorganized and continue to have problems of integrating the settlement.

- The lesson here is that before trying to introduce changes in a settlement, it is necessary to achieve community integration so that the residents have a shared vision. Thereafter changes may be introduced.
- Cohesive, organized communities will accept conservation programs more readily than atomized settlements.

Comanagement:

The following lessons may be drawn from Canan K'aax's frustration experience in comanagement of LTNP.

- On the one hand, the concept of comanagement was not fully developed and many of the rules and roles of the game were not clear to any of the parties.
- On the other hand, the complex situation found in LTNP has demonstrated that it is difficult for a single organization to do the job, given the need to cover so many diverse topics and confront so many external pressures.
- Finally, Canan K'aax was in the process of becoming a functional organization and thus lacked the required mature organizational structure and culture to confront such a complex challenge.
- What has been learned permits to draw a profile of what is needed to the effective management of the LTNP; if several different actors with different specialties are involved in management, they must have the necessary resources and there must be clear rules of interaction.
- The rules of interaction and the role assigned each actor must be agreed upon and made clear to everybody before comanagement activities are initiated.

Participation in community research:

Since 1998 the ProPetén scientific team has been carrying out biodiversity studies and biological monitoring in the Laguna del Tigre National Park. Given the legal and political situation of the settlements within the LTNP, these activities in one way or another may predispose the people in the settlements to take oppositional postures or actions.

- Involving the communities in the research process, not only as a source of information but also in collecting data, analyzing the results, and communicating results to the community has generated in the settlements an awareness of the importance of scientific knowledge for management of the areas in which they live.
- Involving the communities in the research process gives them access to knowledge that permits them to adjust their activities in order to minimize their negative impact on the ecosystem, and the potential to make rational use of natural resources and link them with economic activities and ecological viability.

In general, the members of the communities acquired important empirical knowledge about the general biology of floral and faunal species in the Park. This empirical knowledge has great utility and is indispensable for successfully completing scientific studies, particularly when the researchers are outsiders.

Information-based management decisions:

Many of the mistakes made in the design and management of the protected areas derives from not having at hand up-to-date information about biodiversity distribution and abundance and associated ecological processes. For example, for lack of scientific information, in designing the Maya Biosphere Reserve no thought was given to the existence of species that move over great distances and utilize distinct selected patches or areas of forest composed by different types of vegetation, whether for feeding or

reproduction, as in the case of the scarlet macaw. In many cases, these patches are outside the protected areas and run the risk of being deforested, thereby affecting conservation work being carried out inside the protected areas.

- In the case of the LTNP, due to the lack of up-to-date scientific data, the design of the Park did not include ecologically important habitats such as mangroves, oak forests and reefs of sweet water from the San Pedro River. However, these data were collected during the AquaRAP study.

Based on adaptive management, all these new data which have now been generated allow us to make corrections to management designs and plans for these protected areas, thereby making the work of conserving natural resources more effective.

The petroleum conflict in the LTNP:

For some time the conjunction of petroleum development and the presence of human settlements in sensitive ecosystems, have resulted in irreversible damage to the environment. The case of petroleum activity in the LTNP, a concession granted before the creation of the Park, has been a truly conflictive theme. This has generated, for example, community strikes, threats from all sides, an absence of coordination among government ministries, political obstacles placed in the path of those who oppose this activity within protected areas, badly designed projects, and use of inadequate methods and technologies. In view of all these problems, the question of whether development and conservation can co-exist remains.

- The lesson is that in Guatemala there is an intense struggle between activist groups and petroleum companies, and that in the case of organizations based in the field, they should not be on one side or the other, but rather develop proposals that seek to conciliate development and conservation activities.
- As a result of the project, the government of Guatemala has established a policy of not authorizing any concession for petroleum activities in protected areas. (CONAP will not give concessions for oil exploration in protected areas).
- Perenco (before BASIC resource, Anadarko), the oil company operating in the Park, began to show interest in conservation and the protection of the Park. The next natural step would be to integrating the company in the Support Committee for the LTNP.

Environmental education in Petén – the case of CISEA:

The environmental education efforts focused on and in the LTNP and approved by the Ministry of the Environment and Ministry of Education, have resulted in creation of a series of materials distributed to different educational centers throughout Petén, elaboration of an environmental education curriculum, and training for teachers within the LTNP. The Ministries of the Environment and Natural Resources and of Education identified all this as “valuable support,” and they decided to form a commission to promote environmental education throughout Petén. The commission is composed of 25 organizations and is lead by the Ministry of the Environment and Natural Resources, and this may be replicated

throughout Guatemala as a whole. As a result of the efforts mentioned, the Ministry of Education approved an environmental education pilot plan for all of Petén based on experiences within the LTNP and integrating its communities in the plan. The pilot plan is reaching culmination now, and it is almost assured that environmental education will be formally established and integrated into all the schools in Petén.

- Building a constituency for environment education is an iterative process.
- Environmental education materials must be tailored to the particularities of the specific locale of the students and teachers.
- By sharing all the experiences generated in the LTNP with the above ministries, a unique opportunity was created which we believe will change the history of environmental education in Petén and in all of Guatemala.

IV. FINANCIAL MANAGEMENT STATUS

Summary of Audit Reports received and periods that they cover over the course of the project; and assessment from the internal Financial Management Review of these reports.

- ✓ From October 1999 to June 2000 sent it august 2000
- ✓ From July 2000 to June 2001 sent it august 2001. The Bank Financial Management Specialist (FMS) requested a specific report and opinion on the special account statement, and an opinion on eligibility of expenditures financed by the grant (a requirement that has been included in recent MSP Briefs) and it was provided. The FMS also requested an additional note to the financial statements including the special account balance reconciled with the available cash per the "statement of changes in fund balances". All of these was provided following the format supplied by the Bank.
- ✓ From July 2001 to march 2002 pending.

Due date of final statement of account and external audit/ period to cover: September, 2002.

Received by task manager: Yes/**No**, If the answer is "no", please indicate when it is expected: September 16, 2002

ANNEXES

1. GEF publications of LTNP
2. LTNP comparative table.
3. Agreement signed of LTNP support committee.
4. Ministry agreement recognizing CISEA.
5. Deforestation in the Mayan Biosphere Reserve from 1997-2000, 2000-2001
6. LTNP Strategy 2002-2007