

**Final Independent Evaluation
UNDP-GEF PAN/94/G31**

**Project *BioDarien* (1995-2001):
“Conservation of Biodiversity in Darien through Community
Sustainable Development”**

Final Report

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**National Environmental Authority of Panama (ANAM)
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1. Introduction

1.1 Background of Project BioDarien

Project PAN/94/G31 “Conservation of Biodiversity in Darien through Sustainable Community Development” (Project *BioDarien*) was executed by the Panamanian Government between 1995-2001. Its initial implementation between 1995-98 faced different difficulties, which resulted in its evaluation and reformulation in 1998. The first phase received support for US\$2 million from the Global Environment Facility (GEF) through the United Nations Development Programme (UNDP), and US\$500,000 from the Panamanian Government. The following phase (1999-2001) received US\$ 1.16 million from the GEF, these were unspent resources from the first phase, as well as co-financing from different national and international organizations, totaling US\$ 2.97 million.

The project's main objective was “the protection and conservation of the rich biodiversity of the remaining forests of Darien, through the development of local capacities and the implementation of sustainable practices for the use of natural resources”. With the purpose of achieving a greater impact, project activities were focused on the Darien National Park (DNP), its influence zone and the Filo de Tallo and Canglón Reserves. This complex represents the most important sample of biodiversity in the country. The Darien National Park has been declared as Biosphere Reserve of the (MAB Program), and a World Heritage Site (both by UNESCO). As indicated by the main objective, the project tried to integrate elements of participatory sustainable development with the strengthening of management capacity of the protected area.

After being reformulated in 1998, the project had the following specific objectives:

1. To identify, develop and implement participatory planning activities for the protection and sustainable use of the natural resources of the Darien region.
2. To strengthen conservation and sustainable development operations in the Darien National Park and in the Filo de Tallo and Canglón Reserves.
3. To demonstrate the feasibility of sustainable uses for forests and other wild resources.
4. To raise awareness in local communities and promote knowledge on the value of natural resources in the project area.
5. To increase and diversify the basis of financial resources for the conservation of Darien's biodiversity.
6. To increase the local population's knowledge of Darien (particularly among non-indigenous groups), regarding the natural resources of the Darien National Park and its influence zone and its current conservation status.

1.2 Terms of Reference and Methodology Used

Terms of Reference

One of the objectives of the final external evaluation was the analysis of the methodological aspects, achievements and contents of the results obtained, and the processes initiated during the Execution of Project BioDarien for the period 1995-2001, putting special emphasis on the second execution phase (1999-2001). The conclusions and recommendations are relevant to the implementation of future GEF and donor-funded projects and conservation of biodiversity.

The Terms of Reference indicate the following areas to be addressed by the final independent evaluation (see Annex 1: Terms of Reference):

1. *Degree of progress* of project activities and expected results according to project document (1998), its objectives and the indicators contained in the logframe matrix.
2. *Capacity* of the project to *coordinate* with ANAM, with other governmental and non-governmental institutions, as well as other international projects, such as the Darien Sustainable Development Programme (IDB), and the Mesoamerican Biological Corridor (World Bank-GEF).
3. *Level of impact* of the above-mentioned activities on the conservation of Darien's forest ecosystems, mainly those found in the Darien National Park.
4. *Degree of participation*, acceptance and motivation of beneficiaries affected in the vicinity of the Darien National Park.
5. Project impact due to the *institutional strengthening* of ANAM with regards to conservation and sustainable development in Darien.
6. *Performance* of UNDP and the national co-execution agencies during the design and execution of the project.
7. *Sustainability* of project's activities in political, institutional, economic/financial, technological, socio-cultural and environmental terms, considering the possibility of replicability.
8. *Risk and threat analysis* that affect the project and biodiversity conservation, as compared to the initial project document (1994 and 1998).

Methodology used

The evaluating team was hired for a period of fourteen days (2-15 May, 2001). During this period, different activities were carried out including (1) documentation review, (2) interviews, (3) field visits and (4) participatory meetings. Among the persons and organizations interviewed were government institutions, non-governmental organizations, beneficiary community groups, indigenous councils and representatives from other international projects. Besides evaluating the degree of progress of the objectives established in the project document, the evaluating team considered the working processes of the technical unit (i.e., coordination, management and coordination, follow-up), and criteria identified by the GEF in its operational programs (i.e., conservation of forest ecosystems, sustainability, institutional strengthening and participation).

The evaluators met during five days in Darien with ANAM's Regional Director and other team members in Metetí, agricultural association representatives (credit committees) of Canglon, Santa Librada and Punta Grande (Tupiza River), Technical Unit Coordinators of Project BioDarien (Yaviza), the Director, staff and park rangers of the Darien National Park (El Real and Rancho Frio), supervisors related to the environmental education programme (El Real), and representatives of project MIDA-ProDarien (Yaviza).

In Panama City, the evaluating team interviewed staff from Project BioDarien, the UNDP Resident Representative and Programme Officer, ANAM's Deputy Administrator (National Director of Project BioDarien), leaders of the General Embera-Wounaan Indigenous Council, representatives of the NGOs Dobbo Yala, Fundación Natura, ANCON and The Nature Conservancy, as well as personnel from the Mesoamerican Biological Corridor (World Bank-GEF), and the Darien Sustainable Development Programme (IDB) (see Annex 2: Mission Report).

The following are some of the main documents reviewed: the original Project Document (1994), the reformulated Project document (1998), the *External Evaluation Mission Report* (mid-term, February 1998), *Tripartite Evaluation Report* (December 2000), *Systematization of Project BioDarien* (May 2001 draft), Annual Reports of Internal Evaluations (Project Implementation Reviews—PIRs) for the years 1997-2000, Annual Operational Plans (POAs) for the years 1995, 1996, 1999 and 2000, *Diagnosis of the Darien National Park (Technical, Administrative, Managerial and Financial) through the Application of the SWOT Tool and the Elaboration of a Strategic Plan to Facilitate a More Efficient Management of the Protected Area* (RCE Consulting, October 2000), *Technical Report of the Consultancy for the Implementation of an Ethno-Cultural Financing Model for the Darien Region* (Carrillo & López, Dec. 1997), and a *Work Plan Proposal for the Execution Unit* (Tresierra, Dec. 1994)

This report has the following structure: (1) Introduction; (2) Global context of the project (problem addressed and baseline, socio-political context, organization of the environmental sector, operational structure of the project, other international projects in Darien); (3) Results achieved according to the objectives and indicators established in the project document (1998); (4) Scope of the project vis-à-vis GEF's criteria (conservation of forest ecosystems, institutional strengthening, sustainability, participation, performance of the executing agencies and risk and threat analysis); (5) Observations on work processes and elements not taken into consideration in the project document (design, implementation, execution, management and coordination mechanisms, follow-up of activities, and monitoring and evaluation); (6) Conclusions and Recommendations; (7) Lessons learned; and (8) Annexes (Terms of Reference, Mission Report).

2. Global Context of the Project

2.1 Problem addressed and Baseline

Summary of Ecologic Importance - The *Choco-Darien Ecoregion* has one of the world's richest biotas, with exceptional richness and endemism in a wide range of taxa, including plants, birds, reptiles, amphibians and butterflies. In the highest parts of the ecoregion of the mountainous forests of Eastern Panama, in the highest peaks of the mountainous ranges of San Blas, Darien, Maje and Pirre, the flora and fauna of these mountains, relatively isolated, are constituted by numerous endemic species that present a rare assemblage and affinity with elements found in South and Central America. At least ten main types of vegetation are included in this province, from the coastline and the coastal dry forests and mangroves, through salt and fresh water swamps, to various types of humid forests (from premontane to montane). Of the five life zones, four are present in this province: very humid tropical forest, very humid premontane forest, premontane rainforest and low montane rainforest. In the *Conservation Assessment of the*

*Terrestrial Ecoregions of Latin America and the Caribbean, the Outstanding Biological Distinctiveness at the Global Level, and the vulnerability of the conservation status of the Choco-Darien humid forests ecoregion stand out, making it an ecoregion of Maximum Global Priority for Conservation.*¹

Main Threats - The project document (1998) identifies as main threats to the biodiversity of Darien the conversion of land to agriculture, cattle raising and forestry with exotic species. Other threats are subsistence and commercial hunting, logging and non-regulated harvest of commercially important plants. In spite of these processes, most of the province still maintains large unbroken blocks of forest cover. Most of these activities are concentrated along the Pan American Highway, a zone inhabited mainly by immigrants from the central provinces.

Analysis of causes - Among the direct and indirect causes of the above-mentioned threats, the project document (1998) lists the following:

- Insufficient technical and institutional capacity (both governmental as well as non-governmental) to support all the protected areas in the region (Darien National Park, its influence zone and associated reserves).
- Insufficient infrastructure, staff and equipment for the appropriate management of the protected areas, including zoning, demarcation and updating of management and operational plans.
- Poor understanding of the General Environment Law by key stakeholders (including authorities who must enforce the law).
- Limited capacity to enforce environmental and natural resources management laws.
- Poor integration of ecologic considerations in different programs of agricultural development, livestock and forestry, among others.
- Inappropriate legislation of access to land and land tenure allocation, thus favoring the development of extensive cattle raising.
- Possible ecologic impact due to the improvement of the Pan American Highway (promote occupation of valuable ecological areas).
- Low level of public awareness on the values and conservation needs.
- Poor availability of information on possibilities of international trade of natural and wild resources as an alternate income-generating source.

Baseline - Due to the varied and complex factors that influence the changes in the use of land and the environmental deterioration of Darien, the project document identified six focus areas. It is worth mentioning that the reformulation of the project in 1998 tried to be congruent with the initial design, timing and remaining sources. The following baseline considers certain aspects of biodiversity conservation in Darien back in 1998. Afterwards, under Section 4 of this report, we will analyze the degree of progress or the current state of this framework.

¹ Data from the Project Document (1998) based on Dinerstein et al. 1995, and the Smithsonian Institution and ANCON 1998.

1. Participatory planning for the conservation of natural resources.

The situation is characterized by the limited experience of key stakeholders in the application of participatory methodologies for protected areas and natural resources management. Institutional structures for participatory management, as well as concrete proposals for co-management of protected areas and the organization of local management committees are nonexistent.

2. Operations of the DNP and the Canglón and Filo del Tallo Reserves.

The situation is characterized by lack of staff, adequate equipment and infrastructure for control, research and interpretation. In general terms, the training programs for the staff are incomplete. There are not enough courses and they lack quality. The staff is not aware of innovative approaches such as co-management, the integration of indigenous populations and participatory evaluations of resources and limitations. The fulfillment of duty is weakened by deficiencies in the use and management of basic tools such as: maps, mechanical skills, firefighting, handling of audiovisual equipment, etc. The capacity to monitor the state of biodiversity is weakened by lack of specific information.

3. Demonstrations on the sustainable use of natural and wild resources.

The situation is characterized by limited knowledge on the population's dynamics for sustainable crops, lack of technologies and management techniques. There is a lack of knowledge of the demands of international markets and the requirements for access to them, as well as poor planning capacity and funding of sustainable use of natural and wild resources.

4. Conservation values in the project area.

Even though a wide range of awareness raising activities on environmental issues are carried out by governmental and non-governmental organizations, there is little interaction with school programs, and limited information on the economic values of organic agriculture.

5. The basis of financial resources for biodiversity conservation.

In spite of the creation of the Ecologic Trust (FIDECO) with resources from the Government of Panama, the USAID and The Nature Conservancy (US\$28 million) to guarantee a permanent and indefinite flow of funds for nature conservancy in the country, there is still a lack of local capacity to detect new sources of income, and prepare projects for funding, based on sustainable use of natural resources and ecologic agriculture.

6. Knowledge of the natural resources and their current state in the DNP and its influence zone.

The situation is characterized by a marked lack of information on the state of the wild resources in the region. As a result, management and promotion of protected areas and natural resources face serious restrictions.

2.2 Socio-political Context

The Province of Darien is located in the easternmost part of the country, covering most of the border with the Republic of Colombia. Its extension is 16,671 km², which represents 22% of the country's total

surface. Its population represents only 2% of a national total of 2,839,177 persons, including the indigenous population of the Emberá-Wounaan *Comarca* (autonomous territory) (2000 Population and Housing Survey). It registers a 12.3% variation in the 10-year intersurvey period in the non-indigenous area, and 3.5% in the indigenous area, significantly less than the national average that was estimated in 21.5%. Its population density is also the smallest in the republic, approximately 3.4 inhabitants per km² compared to the national average of 35.4 inhabitants per sq. km.

The population of the province comes from three different ethnic groups (indigenous, Afro-colonial, and immigrants from the central provinces), which have different cultural backgrounds and production means. The indigenous groups are part of the Emberá-Wounaan *Comarca* created in 1993, and its cultural ways and community organization are established through the General Council and its structures. However, when it comes to the election of some authorities represented in the state agencies (*Corregimientos* within the areas of the *Comarca*), the laws of the Republic rule over its political organization.

The human settlements in the province are occupied mainly in agricultural activities and to a lesser degree, to cattle raising and some trade services. These settlements are affected by significant poverty. The districts and the Emberá *Comarca* of Darién are located in the low and lower levels of relative development with regards to the satisfaction of basic needs (Herrera, Ligia, 1994), which shows a serious situation of child malnutrition, illiteracy, lack of technical and professional education, among other characteristics. The indigenous populations at a national level suffer the highest levels of extreme poverty (Ministry of Economy and Finance [MEF], ENV, 1997).

2.3 Organization of the Environmental Sector

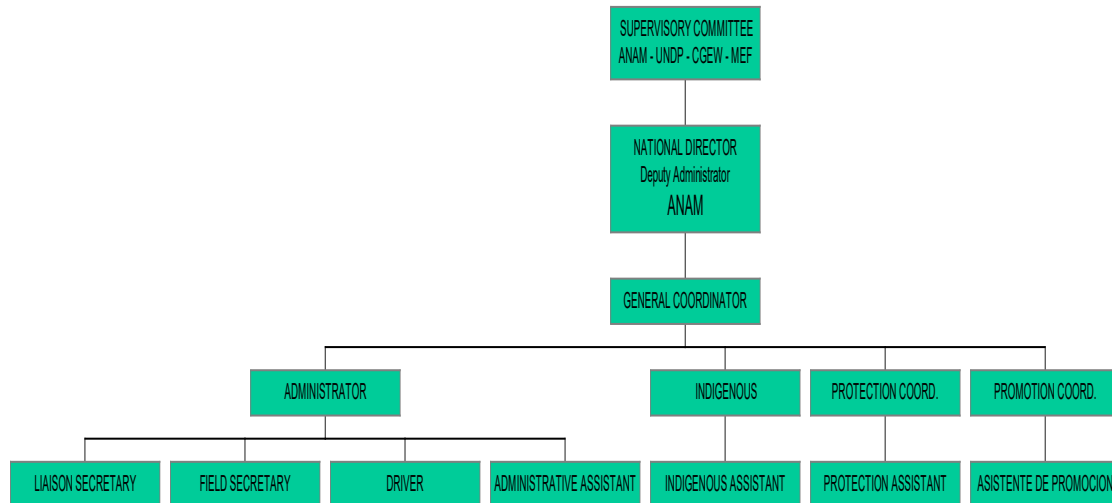
The ANAM is the governing institution of the policies and wild resources conservation and development actions, particularly waters, lands, wild flora and fauna, as well as watersheds. The functions of this state institution are the definition, planning, organization, coordination, regulation and promotion of the use of natural resources. Among its main policy guidelines are the definition of governmental and non-governmental actions at the local, regional and national level, which will guarantee the efficient and effective intersectorial coordination for the protection, conservation, enhancement and improvement of environmental quality. The integration of the national environmental policy to public state policies is another of its objectives.

Therefore, its organization incorporates the participation of other governmental and non-governmental institutions in the definition of policies, and the search of alternatives for natural resources management.

The National Environmental Consultative Committee is part of ANAM's structure. This committee has representatives from the Government, the civil society, and the indigenous *comarcas*.

2.4 Operational Structure of the Project

The project's technical work was organized around three axes: promotion, protection, and indigenous coordination. Its structure consisted of two operational levels: (1) a supervision committee integrated by representatives of the National Environmental Authority (ANAM), UNDP, Emberá-Wounaan Council and the Ministry of Economy and Finance; (2) a Technical Unit (TU). The TU established its offices in Yaviza with a liaison office in Panama City.



Source: Project BioDarien

2.5 Other International Projects

Several projects aimed at the conservation and protection of natural resources have been carried out in Darien. Besides BioDarien, which has been the first initiative with a strong participatory component, the development of the Sustainable Development Programme in Agricultural Frontier Zones in Central America (PFA), with support from the European Union; the Project Prioria Copaifera executed by ANAM and STRI, with ITTO funding has ended; the Darien Rural Sustainable Development Project is still under the execution of the Ministry of Agricultural Development (MIDA) with aid from the CAF, IFAD and support from UNDP; the Darien Sustainable Development Programme with funding from the Inter-American Development Bank (IDB); and the Mesoamerican Biological Corridor Project (Panamanian Atlantic), with funding from the World Bank and the Global Environmental Facility.

Other programs focused in some areas are developed by non-governmental organizations like Fundación Pro-Niños del Darien, the Trust Fund administered by Fundación NATURA, and the projects of ANCON and Fe y Alegría, among others.

International Projects in Darien 1995-2005

Project (Funding Agency)	Amount
1. Sustainable Development Programme in Agricultural Frontier Zones of Central America (European Union)	US\$1.16 million
2. Darien Sustainable Development Project of the Ministry of Agricultural Development - MIDA ProDarien (IFAD)	US\$ 14 million
3. Management of Prioria Copaifera and Non-Timber Products Project (ITTO)	US\$1.5 million
4. Darien Sustainable Development Programme (IDB)	US\$88 million
5. Mesoamerican Biological Corridor of the Panamanian Atlantic (World Bank-GEF)	US\$ 12 million
6. Ecologic Trust (FIDECO) Fundación Natura (Government of Panama/USAID/TNC)	US\$50,000 (per year)

Source: Project BioDarien

3. Results Achieved by Objective

3.1 Global Summary

The Project BioDarien “Conservation of Biodiversity in Darien through Community Sustainable Development” (PAN/94/G31), has satisfactorily fulfilled the objectives established in the second project document (1998). Beyond the specific activities that were stipulated, the project:

- regained its credibility after a crisis period;
- implemented a micro-credit programme that strengthened community capacities and promoted the participation of women;
- consolidated an efficient technical team that worked for two years;
- adapted its activities in an appropriate way to new opportunities and conditions;
- coordinated its efforts with other projects;
- achieved significant levels of co-financing.

In quantitative terms, the project presented significant achievements in its six main focus areas, even though it did not complete certain activities foreseen (i.e. awareness raising of local communities). At the same time, it began other unforeseen activities, which contributed to the objectives (i.e. environmental sanitation). It managed to satisfactorily comply with four of the specific objectives established: (1) participatory planning of protected areas, (2) strengthen operations in DNP and other reserves, (3) demonstrate feasibility of sustainable use of natural resources, and (4) increase knowledge of Darien’s local population. Its performance was highly satisfactory with relation to (5) increase and diversification of financial resource basis, and unsatisfactory with regards to (6) increasing awareness in local communities due mainly to unforeseen circumstances.

In qualitative terms, it is our opinion that the project has managed to establish promissory structures and organizational processes in different communities in only 18 months. In spite of the fact that these are

modest achievements, it is worth noting that the technical team established this basis with relatively little inputs under difficult circumstances. This participatory work system is being systemized for future application by other projects. In most cases, these processes have a high probability of success at the long-term; however, more follow-up is necessary to guarantee their continuity.

In the following analysis, it is important to bear in mind that the evaluation of the degree of progress by indicator (0-100%) represents a qualitative approximation that in our opinion provides a better indication of the quality of the final product that is not reflected in the quantitative indicators established in the project document.

3.2 Results Achieved by Specific Objective

Specific Objective 1: Identify, develop and implement participatory planning activities for protection and sustainable use of natural resources in the Darién region.

Compliance is satisfactory, even though it did not manage to carry out all the activities foreseen in the project document.

First, the project contributed significantly to the compilation and organization of basic information for the formulation of a management plan. On one hand, it coordinated efforts and financed research activities in the DNP by the ICAB and the Museum of Invertebrates of the University of Panama. On the other hand, through a subcontract with ANCON, which was financed with the cooperation of the British Embassy, the project created a database that organizes available information about Darién on cultural, socio-economic and environmental subjects. Finally, by the end of 2000, the project organized a participatory workshop on the current state and future management actions in the DNP. The event brought together representatives from ANAM, the DNP, park rangers, Project BioDarién and NGOs (Fundación Natura and ANCON), and utilized a participatory methodology to analyze strengths, weaknesses, opportunities and threats (SWOT).

Remarks: Even though all these activities represent an important source of information, there is still need for a greater systemization of existing data, as well as an analysis of the gaps, before initiating the formulation of an operational management plan. With regards to the participatory processes (SWOT) carried out in September 2000, there is no follow-up plan to implement its conclusions and recommendations. As to the database, there is a distribution plan to interested organizations, but no actions have been taken to update it or make it available to the public (i.e. in ANAM's web page). The project reports indicate that the research studies carried out by the ICAB are of very high quality. However, it is worth pointing out that these studies have not yet been integrated to the incipient management planning processes of the DNP. On one hand, the reduced number of technicians available in the regional offices and in the DNP limits the capacity to absorb these new types of inputs. On the other hand, the different activities that support the DNP management have been isolated contributions, and are not a part of the park's action plan.

Second, the project could not update the Darién National Park Management Plan as was outlined in the project document (1998). A broad range of factors contributed to the little progress made in this component, including staff rotation from the DNP and ANAM's regional office, and incipient work processes with the communities in order to regain credibility and interest.

Remarks: Due to the high complexity inherent to the adoption of a participatory strategy in a region that does not have previous experiences with these practices, the objective of updating the DNP management plan was not realistic, taking into consideration the resources and time available for the second phase.

However, the project has managed to establish the bases for financing (US\$250,000 of the IDB Darién Sustainable Development Program) and institutional coordination that will lead to an update of the plan. It is necessary to explain how the DNP management program, its influence zone and associated reserves (Filo del Tallo and Canglon) could be part of a strategic plan for the whole region. It is also worth defining how the management programme for these protected areas reflects the national strategy and the Biodiversity Sustainable Action Plan (BSAP).

Third, the organizational processes that the project implemented in the communities of Canglon, Santa Librada and Punta Grande through the ethno-cultural financing model (MOFEC) did not turn into the local management support committees of protected areas shown in the indicators' matrix. However, such agricultural associations could become an important basis for future participatory planning activities of protected areas, if they receive follow-up. It is important to stress that the project began an environmental sanitation programme as a response to requests made by the five communities of the Tupiza River. Even though these activities were not foreseen in the project document, they had a positive impact on this objective.

Observations: It is worth noting that when the project's new execution phase began in 1999, the technical team faced high levels of mistrust by numerous local communities, as a result of the prevailing perception of unfulfilled commitments by other persons during the previous cycle. In spite of these conditions, we believe that the technical team managed to adapt appropriately, because it regained the confidence and interest of local dwellers and reestablished its credibility. In the case of the environmental sanitation programme requested by the riverside communities, the project adapted its operational plan properly, but an in-depth review on more adequate environmental sanitation techniques for these rural communities still needs to be done. In Punta Grande, for example, there is currently an open garbage landfill that could turn into a focus of diseases during the rainy season.

Fourth, even though the project managed to make different projects and organizations coordinate their activities regarding the DNP, and that support for a management plan was guaranteed, there is still no interinstitutional programme to direct support to protected areas in a coordinated and efficient way.

Remarks: due to the history of institutional changes (INRENARE to ANAM) and the trend of not coordinating efforts between regional projects, it is worth mentioning that the project could promote new interchange and coordination practices. This new modality requires constant follow-up. In this sense, ANAM has played an important role as a leading institution among donors, non-governmental organizations and other governmental institutions. However, it is necessary to establish and systemize a financing strategy for protected areas in the region, as is indicated below (Specific Objective 5).

Indicators:

#	Deadline	Indicator	Progress
1	End of 5 th year	Basic information for the formulation of the Darién National Park Sustainable Management Plan is available.	50%
2	End of 4 th year	The Darién National Park Management Plan has been updated.	30%
3	End of 4 th year	Two groups of local support have been created, one for the DNP and another one for the Filo de Tallo and Canglon Reserves.	40%
4	Non-specified	Efficient management of bilateral and interinstitutional support for the DNP and its areas of influence.	50%

Specific Objective 2: Strengthen conservation and sustainable development operations at the Darién National Park, and the Filo de Tallo and Canglon Reserves.

Compliance is satisfactory since the project has increased the park's infrastructure, supported its staff financially, provided equipment and facilitated training workshops.

First, the project contributed by providing the DNP with signs in the most vulnerable access points; in spite of this, the borders of the Filo del Tallo Reserve were not established. In the DNP, the project financed signs that indicate entry points. In the case of the Filo del Tallo Reserve, project reports affirm that there were deep differences between the project and the area's most important organization, Let's Save the Filo del Tallo (Organización Salvemos el Filo del Tallo) regarding decision-making processes.

Remarks: the DNP seems to have well demarcated borders due to the region's low population density. According to some people who were interviewed, the placing of signs in at least one area had a negative impact in getting the project closer to certain communities, since the local people perceived it as an imposition from the government. With regards to the Filo del Tallo Reserve, it would be necessary to study the reasons why the project and the Filo del Tallo Organization did not reach the necessary agreements to perform the activities foreseen.

Second, the DNP staff attended seven training workshops through the project, including specific courses on environmental interpretation, cartography (2), use of databases, participatory evaluation (SWOT), meteorology and training of park rangers. Project reports indicate that ANAM's high and medium-level officials could not be trained.

Remarks: Without underrating the training workshops organized by the project, it is worth noting that there has not been enough follow-up to guarantee that the efforts carried out have a long-term impact. For example, in spite of the fact that the park staff has received training in cartography, they lack the equipment (compass, etc.) to apply their knowledge. Likewise, even though meteorology equipment has been installed in the Rancho Frio Station and the staff has received some orientation, the instruments are not being used because they operate with computerized technology, and none of the technicians or park rangers knows how to programme them. As a result, data for the management of the park is not being generating. The local park offices seem to lack the necessary computer equipment to maintain the databases updated. We verified there are a desktop computer and a lap top (this last one contains a DOS version of a database provided by the MAB Program), but there is only one technician with the capacity to handle it (it is worth noting that ANAM's regional office in Meteti will receive new staff in protected areas in the near future). As to the training of high and medium-level officials of ANAM, the frequent rotation of directors and technicians at ANAM's regional office has hindered the permanency and continuity of staff at the technical level.

Third, project reports indicate that staff visits from ANAM's central office to the project area were organized, but not with the frequency expected. Therefore, it did not prove a visit programme as provided for in the project document.

Remarks: As we indicated in the previous section, the constant rotation of staff in the central and regional offices during the last two years has rendered difficult the creation of a training programme for technicians in management of protected areas (natural heritage). Even though the project has contributed to the assignment (pending) of new staff in wild areas, ANAM's regional office has dedicated most of its resources to the administration of forest permits.

Fourth, the project managed to increase the infrastructure of the Rancho Frio Station in a remarkable way, including the installation of a solar panel, meteorological equipment and two 30 meter-long hanging bridges with suspended rolling carts, as well as the improvement of a nature trail with signs and resting areas, etc.

Remarks: Even though the project has contributed to the improvement of the infrastructure of the Rancho Frio Station, it is worth mentioning some aspects, which need further study. First, it is clear that the 20 park rangers are performing their work with enthusiasm and dedication, with limited resources and equipment in a region of very difficult access. Operation costs are very high. Since they dedicate most of their time to surveillance activities, under these conditions it would be necessary to study the feasibility of their participating in technical work, such as maintenance of the database. Second, the project paid the salaries of 6 park rangers for 5 years, who are currently under the IDB Sustainable Development Program. Even though this support has been important to maintaining the park rangers' team, some of the people who were interviewed mentioned that to a certain extent the support received created a marked difference between the staff paid with external sources (with some additional benefits) and staff paid by the government. Also, it is worth mentioning that the project supported DIRENA (Directorate of Natural Resources) within the General Embera-Wounaan Indigenous Council in the creation of an office in Yaviza, including the provision of computer equipment and adequate working conditions. This last contribution was not foreseen in the project document; however, it represents an appropriate adaptation due to the importance of indigenous coordination in its execution. The design, elaboration and installation of the hanging bridges was assumed as a compromise acquired by the former administration, even though it was not possible to make adjustments as to the material (iron) and other technical aspects that will require constant maintenance.

Indicators:

#	Deadline	Indicator	Progress
1	End of 4 th year	The boundaries of the DNP are clear to its neighbors and the boundaries of the Filo del Tallo Reserve have been established.	50%
2	Not defined	A training programme for 100% of the DNP staff and for 30% of the high and medium level officials from the main offices of ANAM is underway.	80%
3	End of 4 th year	A programme of field visits for staff who work in the Department of Wild Areas of ANAM's main offices is underway.	50%
4	End of 5 th year	Equipped infrastructure has been installed in the central and western part of the DNP.	50%

Specific Objective 3: Demonstrate feasibility of sustainable uses for forests and other wild resources.

Compliance is satisfactory since the project achieved organizational structures and processes under a micro-credit model at the community level, founded the bases for the sustainable utilization of natural resources, began training activities in organic agriculture and environmental sanitation and established a participatory credit and savings program. The long-term impact of these efforts will depend on technical follow-up.

First, the project managed to establish a highly promissory micro-credit model (MOFEC) due to its degree of participation and systemization, as well as its demonstrative power. In a very short period of time (18 months), the project implemented the micro-credit programme in 4 communities (3 were successful), which surpassed the expected results in the project document. In this sense, the project focused its efforts in less communities or projects (4 instead of 20, as indicated in the project document). However, it achieved long-term sustainable organizational processes. In the case of the two highway communities (Canglon and Santa Librada), the agro-industrial associations are managed entirely by women. Monthly payments exceed what was established in the recuperation agreements of the initial

loan. In Punta Grande (Tupiza River), the association is already financing farmers with interests generated by loans made with the project's seed capital. The three associations have legal status.

Remarks: The application of MOFEC in the three communities above-mentioned clearly shows that small financial stimuli can have an important impact when they are accompanied by a training and follow-up program. The technical equipment reestablished an excellent degree of confidence within the communities and provided follow-up to a series of well-designed activities through a participatory process. There are two aspects that are worth studying as the use of MOFEC increases throughout the region. In the first place, the model emphasizes the consolidation of internal organizational processes (which we believe is appropriate); however, it disregards marketing aspects. In the case of the two communities on the highway, both associations have had problems in selling rice through the IMA, which was supposed to pay them a better price, as compared to the intermediaries, but they did not comply with their agreement. Without a marketing strategy, it has been difficult for them to overcome this obstacle. Secondly, MOFEC indirectly emphasizes the links between sustainable development (production) and environmental protection. This type of management is very common in projects that try to integrate these two components. For the next phases of application of MOFEC, the possibility of integrating environmental and cleansing activities, organic production and financial stabilization in the communities would have to be studied.

Second, the project has promoted the creation of plantain and yam organic plantations in the three communities with micro-credit programs. Other efforts to promote the breeding of iguanas and pacas (activities initiated in the project's first phase) in these and other communities failed because they were imposed from outside and lacked technical follow-up. In order to have a long-term impact, agricultural production activities undertaken by the project require follow-up.

Remarks: Organic agricultural production activities seem to be well-founded on existing practices. However, there has been a lack of technical follow-up by specialized agronomists, which exceeded the project's capacity. In our opinion, the fact that they did not manage to establish programs for five species is less important compared to the need to provide follow-up to new projects for organic production of plantain and yam.

Third, project reports indicate that 250 farmers have been trained in organic production techniques. We could verify that the technical team has provided training in at least three communities beyond the micro-credit program. The impact of these long-term efforts will depend on the follow-up actions.

Remarks: Although the local people's production is concentrated on the riverside and the road, it does not seem to represent a strong threat to protected areas. At the same time, the arrival of new groups of immigrants from the central provinces has decreased significantly, and in some cases families have left the region due to speculations on public safety, as a result of actions attributed to Colombian paramilitary groups and banditry. As to technical training activities in organic production, the project began awareness raising and orientation processes, but there is lack of continuous follow-up with expert technicians.

Fourth, through MOFEC, the project established an investment, credit, and production program, and in a lesser extent, a marketing program. This programme exceeded the expected results in the project document as we mentioned in previous sections. The project facilitated the purchase of a rice husker and a manual sugar mill (*trapiche*) by the communities of Canglon and Santa Librada (road), creating a source of services, which are scarce in the region.

Remarks: As we mentioned in previous sections, the MOFEC programme should be replicated with the same training intensity, systemization and follow-up in other communities, and it requires more emphasis in the areas of marketing and environmental protection.

Indicators:

#	Deadline	Indicator	Progress
1	Non-specified	At least 20 sustainable demonstrative projects have been implemented, with different organized groups (indigenous, afros, latinos). Women comprise at least 20% of the beneficiaries.	100%
2	Non-specified	At least 5 wild natural resources are being utilized in an ecologically and economically sustainable way.	40%
3	Non-specified	400 independent farmers have been trained in environmentally friendly production techniques in the surroundings of the DNP and its influence zone.	60%
4	Non-specified	A support plan for investment, credit, production and marketing has been formulated and disseminated.	100%

Specific Objective 4: Raise awareness of local communities and promote knowledge on the values of natural resources in the project area.

Compliance is unsatisfactory since the project contributed to raise awareness in the Panamanian public on the ecologic importance of Darien, but not with the intensity or the necessary follow-up to increase their knowledge. Besides radio programs, the project began an environmental education programme in public schools and improved the infrastructure of the Rancho Frio Station of the DNP, making it more attractive to visitors. These first awareness raising and environmental education activities need greater coordination between the executing agencies and require much more follow-up to guarantee progress considering the objective.

First, it is impossible to confirm in quantitative terms the degree of progress achieved through the awareness raising activities, since there is not a baseline to compare the values before and after the project. However, in qualitative terms, the project produced radio programs, which were translated into the Embera and Wounaan language through the “Radio Voz sin Fronteras,” the main radio station in the region. Besides, it facilitated the production of a presentation “*Images of Darien*” by Sandra Eleta, a renowned Panamanian artist. This same artist made a permanent exhibit of pictures at the main entrance to ANAM's main offices in Panama City.

Remarks: It is clear that the project has contributed to promote a greater awareness of communities in the region, governmental and non-governmental stakeholders, and to a lesser extent, the general public in Panama City. However, we could not find out whether these activities changed the public's opinion or not. There is no doubt that the products promote the region as a highly important ecological site at a worldwide level. It would be necessary to formulate and execute a coherent and integrated dissemination programme to achieve a long-term impact.

Second, according to project reports, five communities related to the project implemented a validation phase for environmental education guidelines. Besides, the project organized a training workshop on the use of guidelines for elementary school teachers. In spite of having initiated a formal environmental programme that could have an important impact in Darien, it still lacks follow-up, since the Ministry of Education decided to update the guidelines according to the new curriculum and apply them at a national

level with support from UNDP. These activities were not carried out, and as a result, the schools of the Darien pilot programme still have not received the complete sets of guidelines.

Remarks: Evidently, the project has contributed in raising awareness in the communities of the region, government and non-government stakeholders, and to some degree in Panama City residents. We were unable to determine, however, whether these activities have changed general public opinion. Certainly, the area output promotes the region as an important world ecological site. The need, therefore, for developing a well-balanced and comprehensive programme aimed at a long-term impact.

Second, according to project reports, five communities involved in the project implemented a validation period for environmental education guidelines. In addition, the project organized a workshop for elementary school teachers on the use of the guidelines. In spite of the official beginning of the environmental education program, which could have an important impact in Darien, no follow-up activities have taken place, since the Ministry of Education decided to update the guidelines in keeping with the new national curriculum to further implement them nationwide with support from UNDP. These activities were not carried out, and as a result, the schools involved in the Darien pilot programme have not received the guidelines yet.

Remarks: The project promoted a promising organizational process among public school teachers in El Real, bordering the DNP. However, once this initiative was taken to the national level through the Environmental Education Department of the Ministry of Education, the regional approach was lost, and follow-up activities were also slowed down. To this end, UNDP provided US\$250,000; however, the educational guidelines were not updated or distributed with a supplementary manual in keeping with the new curriculum. In order to make progress, it would be worthwhile to contact the Ministry of Education, once again, and examine the options available to adjust and distribute the guidelines in Darien. Considering Darien as a pilot-region is recommended prior to introducing the environmental programme in other parts of the country.

Third, according to data submitted by the DNP staff, the number of visitors per year, including local, national, and international tourists, is approximately 80 people. According to project reports, the number of visitors increased by 10% between 1998 and 2000.

Remarks: there is no doubt that the improvements to the Rancho Frio Station infrastructure in the DNP have made it more attractive to visitors. Particularly, nature trails provide visitors with additional learning experience on the park and its natural surroundings. Moreover, a comprehensive evaluation of the infrastructure and services necessary to strengthen a tourism strategy within the management plan is recommended, as part of any follow-up measure. To this end, a survey could help determine changes in public opinion or awareness levels regarding the park.

Indicators:

#	Deadline	Indicator	Progress
1	Non-specified	Public opinion on protecting biodiversity has significantly increased within the project area.	25%
2	End of 4 th year	At least 50% of the schools in the project area are taking part in outreach programs (teachers with environmental education material, field trips to production-based projects, etc.).	50%
3	Non-specified	Number of visitors to the DNP has increased at least by 20%.	50%

Specific Objective 5: Increase and diversify financial resource basis for biodiversity conservation of DNP/WHS.

Compliance is highly satisfactory, as the design and implementation of the revolving fund (MOFEC) has surpassed expected results, included in the document project; and the project has been successful in reaching agreements with various national and international organizations.

First, as the Immediate Objective 3 showed, the ethno-cultural financing model (MOFEC) represents a highly successful experience and an important economic alternative for the communities involved.

Second, regarding any co-financing, BioDarien has developed activities with the British Embassy, Canadian Cooperation Agency, and Natura, including joint activities with the MIDA-ProDarien Project (FIDA), IDB Darien Sustainable Development Program, the Spanish Cooperation Agency, and the International Cooperative Institute (ICI).

Remarks: The project has fulfilled this objective. Developing a financial comprehensive programme aimed at Darien's sustainable development and environmental protection is recommended, in order to strengthen coordination, co-financing, and micro-credit efforts. This plan could be part of a regional global strategy, (i.e. Vision Darien), based on ecological, economic, and political significance.

Indicators:

#	Deadline	Indicator	Progress
1	End of 3 rd year	The revolving fund for sustainable uses of natural resources is underway.	100%
2	End of 3 rd year	Other financing sources support the implementation of project activities.	100%

Specific Objective 6: Increase knowledge of local populations of Darien, especially non-indigenous groups, on DNP/WHS natural resources, influence zone, and their present conservation status.

Compliance is satisfactory, since ICAB and the Museum of Invertebrates of the University of Panama have completed several science studies through a subcontract with the project and disseminated results in various bulletins and reports. In addition, ANCON has created a database, which organizes available information on Darien.

Remarks: even though the project has carried out the activities foreseen in the project document, it has not been determined whether these activities have promoted awareness raising in the local population of Darien, regarding DNP natural resources in keeping with the objectives. In other words, the logframe matrix indicators do not show the immediate objective.

Indicators:

#	Deadline	Indicator	Progress
1	Non-specified	Reports published on inventories and current status of animal and plant population in Darien National Park and other protected areas in the region.	100%
2	Non-specified	Outcome of research initiatives carried out through different events.	50%

Summary of Results Achieved by Specific Objective

#	Objective	Compliance	Indicators	Progress	
1.	Participatory activities on DNP planning.	Satisfactory			
				1. Basic information on Management Plan	50%
				2. Updated Management Plan	30%
				3. Four local support groups	40%
				4. Efficiently-managed support	50%
2.	To strengthen operations at DNP, Filo del Tallo, and Canglon Reserves.	Satisfactory			
				1. Clearly set borders and reserves at DNP	50%
				2. Staff/official training	80%
				3. AS staff field visits	50%
				4. Operational infrastructure	50%
3.	To demonstrate feasibility of natural resources sustainable use.	Satisfactory			
				1. Twenty demonstrative projects	100%
				2. Five wild resources used	40%
				3. 400 trained farmers	60%
				4. Investment, credit support program	100%
4.	To raise awareness in the communities.	Unsatisfactory			
				1. Public opinion has changed	---
				2. Environmental education in 50% of schools	50%
				3. DNP visits increased by 20%	50%
5.	To increase and diversify the basis of financial resources	Highly satisfactory			
				1. Revolving fund underway	100%
				2. Support from other financial sources	100%
6.	To raise awareness on DNP in local populations.	Satisfactory			
				1. Inventories/reports issued	100%
				2. Research outcome disseminated	50%

4. Global Environmental Facility (GEF) Criteria

4.1 Conservation of Forest Ecosystems

The Project BioDarien (PAN/94/G31) - "Conservation of Biodiversity in Darien through Sustainable Community Development", has set the bases for a co-managing participatory programme of the protected areas, improving the infrastructure, and technical capacities of the DNP personnel, establishing demonstrative projects for sustainable use of natural resources, raising the levels of scientific knowledge, and achieving co-financing for environmental protection activities. The project has contributed in the protection of forest ecosystems in a very short period and under very difficult circumstances. Notwithstanding the project's small-scale achievements, it has supported the establishment of organizational processes, which could have a multiplier effect at the regional level.

4.2 Community-based Participation

In general terms, the project has achieved an important level of participation in keeping with the objectives. The first designing process in 1994 included outreach workshops in Darien communities, and initial activities of the technical staff in 1995 promoted a participatory analysis to define productive projects. Notwithstanding these efforts, the technical team was unable to establish a reliable relationship with local communities during the project initial stage, resulting in lack of communication with community members and few follow-up activities. The gap between project representatives and the communities was further broadened due to changes in project staff.

Most communities mistrusted and other strongly rejected the new technical unit, which arrived with the 1998 reformulated project. In the Embera community of Punta Grande, where the project established a micro-credit program, it was necessary for a well-known nun in the region to intervene in order for the residents to accept the staff responsible for project promotion. Eventually, the technical team regained their credibility in several communities; however, activities in other communities were abandoned, as the residents were dissatisfied with the project performance during the previous stage. Evidently, non-compliance by the first technical unit had an important impact on the various activities included in the second 1998 project document.

At the community level, the project established highly participatory activities through the revolving fund. Through MOFEC, the project established a structural organization, opening the door to dialogue between the residents interested in the micro-credit programme and project representatives. The technical team concentrated efforts on four communities, (three were successful) in order to improve their image. The most important advances with MOFEC were the result of the technical team's commitment and follow-up efforts. The residents of Santa Librada, Canglon, and Punta Grande consider themselves the owners of the farming associations, as they have participated in their development from the outset.

At the project level, the technical team maintained an appropriate level of communication with ANAM and other projects. Annual Operational Plans (AOP) were implemented as the in-house planning method. In several work cycles during the initial stage, the Technical Unit was able to include representatives from the Indigenous Council to define and set an action plan. The action plan, however, was not executed in keeping with the agreement, due to the subsequent participation of the chief external technical advisor, thus obstructing the implementation of activities. When the project was reformulated in 1998, the new

Technical Unit followed a clearly defined planning method; however, it did not adopt participatory practices due to time constraints.

At the supervisory level, evidently, the project structure prompted participation from government entities, the executing agency (UNDP), and the General Embera-Wounaan Indigenous Council. The indigenous groups were well represented. It would have been interesting to invite representatives from latino and afro-colonial communities, since they do not have the same level of organization or enjoy the same rights before the law. These two groups are considered to be state-represented, while the indigenous groups enjoy some level of autonomy for managing resources within the two *Comarcas* near the DNP.

4.3 Institutional Strengthening

The project contributed in strengthening community organizations through MOFEC, supporting DIRENA of the General Embera-Wounaan Indigenous Council, training DNP personnel, and improving park infrastructure in the Rancho Frio Station. In addition, the project in cooperation with ANAM has promoted and supported efforts to increase coordination of international projects underway in the region. Notwithstanding these important efforts, the national park, ANAM's regional office, and DIRENA (General Embera-Wounaan Indigenous Council) still experience institutional weaknesses.

Both the national park and ANAM's regional office have limited technical staff to manage the protected areas. At DNP in El Real, there is a single technician with the Director and management assistant. ANAM's regional office in Meteti mainly handles forest permits. Therefore, a limited number of specialists in the protected areas strongly prevent appropriate management. In addition, the director and technical staff in both agencies have been changed regularly. At present, there is no skilled technical team to manage the protected areas.

The Directorate of Natural Resources has been recently created within the General Embera-Wounaan Indigenous Council. There is an ecological supervisor for both *Comarcas* in the region. The project provided financial support for an office in Yaviza with computers. The Council would have to assign more skilled staff and resources in order for DIRENA to have an impact in the region. In addition, promoting closer contacts with the councils in the watershed is recommended.

4.4 Performance of Executing Agencies

Overall, both ANAM and UNDP have contributed to the success of the project.

ANAM, the national executing agency, has coordinated and monitored activities in a positive way, preventing unnecessary limitations. During the past two decades, international projects have been implemented independently in most cases. The creation of ANAM set forth in Law 41 of 1998, and efforts of its initial administrators were aimed at developing "a leading entity" amongst other government, non-government organizations, and international projects. Regarding this project, we acknowledge that the current deputy administrator has promoted positive relations with BioDarien coordinators, facilitating efficient and respectful interaction with the technical team. Therefore, any politization in planning of activities and appointing technicians was prevented.

The UNDP has invested significant resources to support conservation and sustainable development in Darien through the creation of a liaison office in Yaviza. In addition, it has indirectly adopted a US\$250,000 project for the Environmental Education Department of the Ministry of Education aimed at

updating and distributing the educational guidelines previously mentioned, but requiring follow-up. Since the UNDP handles several projects supported by international financing organizations, it has an important role in managing regional resources. Its experience in distributing financial resources through subcontracts will be necessary in speeding up community activities. To this end, we note the importance of studying the eventual establishment of a GEF/Small Grants Programme (SGP) in Panama.

4.5 Sustainability

The project has developed community-based activities to protect and promote the biodiversity of Darien. There are great possibilities for institutional, economic, and political sustainable development, as long as necessary follow-up is included.

Economic sustainability of conservation and development initiatives in Darien seems promising. On one hand, MOFEC promotes more financial independence in each community developing a successful agricultural association. On the other hand, the creation of FIDECO opens the door for financial support of long-term conservation projects at the national level. Since Darien is a priority region in biodiversity terms, important financial support from international organizations is available. The only immediate action should be to develop a financial plan aimed at the protected areas in the region, considering long-term priorities.

Regarding organization and institutional issues, there are elements that could be included in an integrated conservation and development programme for the Darien region, underscoring three levels of organization: community, operational, and institutional.

Locally, MOFEC's structure and participatory process promote an increase in the community "social capital", thus, the residents can become more financially independent. As agricultural associations grow in terms of partners and income, it would be important to consider mechanisms for conflict resolution and setting strategic alliances beyond the communities.

Operationally, BioDarien has strengthened the technical team and a working process, achieving important results with limited resources. To a great extent, the technicians' commitment and follow-up ensure this success in the communities. We must praise the efforts made by ANAM and UNDP in allocating needed resources to keep the team operational between the end of the Project BioDarien and the beginning of the second project supported by GEF and UN Foundation.

Regarding the institutions, ANAM has started an intra and intersectorial coordination process to improve performance and efficiency of actions aimed at the conservation of Darien's biodiversity. During the past two years, ANAM has signed letters of understanding with other ministries and government agencies, establishing a "leading" structure to receive and direct data and resources to the corresponding areas in various agencies. ANAM is the key entity in any integrated plan for conservation and sustainable development in Darien. Therefore, it is recommended that present and future programmes continue strengthening ANAM by supporting and training technicians.

Regarding best practices, the ethno-cultural financing model (MOFEC) offers great potential and could be replicated in Darien, other regions in the country, and eventually in other countries, upon consolidating follow-up and assessment mechanisms in future phases of implementation. The design and structure could become a component of a larger programme, following, for example, the GEF/SGP.

4.6 Risk and Threat Analysis (Baseline)

Overall, the project has contributed with significant improvements vis-à-vis the baseline established in the project document (1998).

Participatory Conservation Planning

This new participatory approach for sustainable community development can be implemented in managing protected areas. Several key stakeholders have been trained in the use of this methodology; however, it is necessary to include them in the work lead by ANAM, the government entity responsible for the country's protected areas. The project has not established local support committees, as the project document recommended; however, the project has set the basis for a participatory process through the ethno-cultural financing project MOFEC. Any extensive changes regarding participatory planning will rely on follow-up activities implemented by ANAM and new projects.

Operations at the Darien National Park, Canglon, and Filo del Tallo Reserves.

The infrastructure and interpretation programs have been significantly improved. There is a permanent group of rangers; however, the managing unit at the local and regional offices in El Real do not have trained technicians awaiting ANAM's appointment of new trained staff for the protected areas. The level of experience in the use of basic tools (cartography, interpretation) has improved; however, there is limited equipment to apply this knowledge. There is still very limited information regarding new approaches, such as co-managing, especially to thoroughly assess the opportunities and potential difficulties within the Darien project.

Demonstrating sustainable use of natural and wild resources.

The ethno-cultural financing model significantly has improved planning, financing, and sustainable use of natural resources in various pilot communities. There is still limited or scattered data on the population's interest in sustainable crops, more efficient technologies, and managing methods, especially of wild resources in captivity.

Promoting conservation values in the project area.

Activities to promote, raise awareness, and disseminate environmental education have been implemented; however, these are still scattered across. The lack of follow-up and integration of efforts aimed at raising awareness and disseminating the environmental education programme limit the impact of early organizing methods.

Creating a financial resources basis for biodiversity conservation.

Raising financial resources for local and national conservation efforts. At the national level, the Ecologic Trust Managing Organization has a US\$28-million budget granted by the Panamanian government, USAID, and The Nature Conservancy (TNC). An annual US\$50,000-allocation for conservation activities in Darien has been granted through the project. At the local level, MOFEC has allocated a revolving fund for agriculture in three communities, two of which, have women as resource managers. A leading plan is still pending to finance protected areas in Darien.

Raising awareness on natural resources and their current status in the Darién National Park and its influence zone.

Scientific research carried out in DNP and dissemination of results through bulletins and reports have increased significantly. A classification programme using a database is in the initial stages. However, extensive integration of research, classification, and dissemination efforts within DNP management operational activities and the regional ANAM office is necessary.

5. Work Processes

5.1 Design

In February 1998, the evaluating mission responsible for the assessment, proposed the reformulation of 1999-2000-project design aimed at recovering wasted time and reach moderate success compared to the original 1994 design. The Executing Agency ANAM and the UNDP Office in Panama promoted the 1998 project assessment to define its future.

Notwithstanding serious difficulties with management and the relationship amongst the project, communities, and other key stakeholders regarding implementation matters, it was recommended to reformulate the project, including objectives and original goals.

The strategic value that the project had for the UNDP, GEF, and ANAM, together with demonstrating the feasibility of community-based development as a means to conserve protected areas were important aspects in reactivating the project.

The new design was based on project recommendations, such as, reviewing the logframe matrix; cutting the project effective action area; granting managerial, financial, and technical autonomy to the project. Regarding the Technical Unit (TU), based on clearly defined technical profiles, a special committee was to select and contract the TU staff; TU monitoring by ANAM deputy administration; establishing adequate project headquarters in Meteti and personnel housing. In addition, recommendations for reactivating the project, operational pace, and assessment were included.

Overall, the initial project design was based on identifying difficulties, followed by a period of consultations, resulting in passive community participation, and finally defining objectives, activities, and an organizational structure. The second period included project reformulation based on assessing the previous period, with fewer participation of the key stakeholders; however, with moderate objectives aimed at drawing them closer to the regional reality.

5.2 Execution

Initially, the second two-year period concentrated time and efforts in recovering the trust of the communities and defining potential areas for developing activities. The main responsibility of the new staff was to reactivate contacts with the communities and stakeholders in the region from the project's headquarters in Yaviza, with a liaison office in Panama City.

Project execution is based on annual operational plans, granting greater autonomy as of 1999 to promote qualitative development. The technical unit carries out plans from headquarters in Yaviza and the DNP with a liaison office in Panama City. The implementation of staff selection standards in the reformulated project has resulted in capable, integrated and committed personnel, a key element in advancing the process.

In 18 months, three (3) communities were benefited with the implementation of the micro-credit program; the DNP has extended its infrastructure, database and signposting; training sessions underscoring various topics were started; intra-institutional relations were strengthened; research on DNP species received support; a promising relationship amongst MEDUC-ANAM-UNDP in using environmental education guidelines was established; new coordination means in the initial stages were established with the Embera-Wounaan *Comarca*; and support was provided for seeking other financing sources.

5.3 Financial Management

The technical unit is in charge of the Project BioDarién budget execution, as part of its managerial duties. Budget execution for the 1994-1998 period was examined extensively, and in some cases, according to audit reports “proof of expenses was unavailable”.

Recent audit of the project confirmed that financial statement reports follow generally accepted accounting standards. It was noted, however, that income, expenses, and budget execution were entered on a cash-assets basis, which is an accounting standard different from the one generally accepted. Whenever these operations or cash expenses take place, it is recommended to set in-house and joint audits on a regular basis.

According to data provided by the project administration, 64% of the US\$2.5-million budget was implemented in 1994-1998 and the remaining 36% in 1999-2000.

1994-2000 Project BioDarien Budget Execution (US\$)

Year	Execution
1994	\$38,097.00
1995	\$191,605.62
1996	\$436,126.76
1997	\$311,633.29
1998	\$548,751.63
1998*	\$47,883.59
1999	\$412,567.26
2000	\$472,406.48
Total	\$2,459,071.63

*Adjustments during the 1994-1998 period; Source: BioDarien financial statements and audits.

Allocations during the project implementation period are distributed into five entries: personnel, subcontracts, training, equipment, and miscellaneous, as shown in the following table. Personnel represent the largest item of expenditure throughout the project implementation, 54.6%, increasing to 60% in the past two years.

Personnel expenses include the salaries of all the people involved in the project. Disparity of salaries is based on the terms of the contract (international, national, consultant), therefore this data represents an important bias. There are six (6) people working at Yaviza headquarters and DNP, in addition to the six (6) rangers and two (2) environmental supervisors from the *Comarca*. International consultants have represented 21% of the expenses in the past two (2) years, except that the records have not allowed the distribution of these expenses based on other standards. Following in order of expenses are: miscellaneous, training, subcontracts, and equipment.

The accounting standards used to record expenses limit the analysis per project component (promotion, protection, coordination with the indigenous people), as well as, the distribution of funds for activities at the liaison office in Panama City (coordination meetings, contacts, etc.) and field activities per area and group of communities.

Project BioDarien Budgetary Execution, According to Allotment per Years 1994-2000 (Percentages)

Year/Allotment	Personnel	Subcontracts	Training	Equipment	Miscellaneous
1994	60.6	0.0	36.5	0.0	2.9
1995	54.9	5.8	6.9	15.6	16.8
1996	58.8	9.9	5.2	14.3	19.8
1997	55.3	11.5	7.3	11.5	14.4
1998*	48.9	22.1	6.6	5.0	17.4
1999	60.0	11.4	9.4	7.5	11.7
2000	59.6	7.8	12.8	5.7	14.1

*Includes implementation adjustments for the 1994-1998 period. Source: BioDarien financial statements and audits.

According to the budget execution reports requested by the mission, approximately 56.6% are personnel and operational expenses, while 43.4% of the budget was allocated to field activities. Therefore, seeking new mechanisms aimed at allocating more resources into the region-base project is recommended,

especially upon implementing the programme in a more efficient manner and recovering the trust of the people in the communities during this period.

In trying to define resource allocations per work component; however, not comprehensively, an estimate was made based on the allocations to field staff only (including a percentage of the liaison office personnel), training sessions (imagining that all of them were carried out in the field or with participation of the staff or beneficiaries), profitable projects under the item of subcontracts, and part of the equipment. Therefore, approximately 39% of the budget during 1999-2000 represented field activities, corresponding to a similar figure provided by the administration.

During the past two years, profitable projects - the micro-credit model in three communities - represented 14% of field activities and fairly 5.5% of total allocations. These projects of moderate impact--as far as the number of communities-- have become a significant element in promoting the BioDarien programme throughout the communities, and a precedent for participatory efforts and commitment to protect biodiversity.

Partial Estimated Costs of the Reformulated Project (1998)

Budget Execution August-December 1998		
Budget Item	Amount	Percentage
Personnel	92,846.00	72%
Subcontracts	0.00	0%
Training	2,089.00	2%
Equipment	12,654.00	10%
Miscellaneous	19,859.00	16%
<i>Total execution</i>	<i>127,448.00</i>	<i>100%</i>

Source: Project BioDarien

5.4 Management and Coordination Mechanisms

The government has recently started to coordinate efforts with other projects and institutions promoting activities aimed at protecting natural resources or community development in Darien, as part of ANAM's operations. The IDB/MEF Sustainable Development Programme has also put into practice a similar initiative. However, programme and project coordination mechanisms are limited in the region.

The BioDarien project has no definite joint methods for integrating and planning the components of the activities developed in the region. In the communities, only the indigenous people, through the Indigenous Council, have set participatory and management mechanisms for projects targeting the Embera-Wounaan *Comarca*. However, accountability standards have not been set beyond proof of expenses. Specific activities of coordination are more frequent amongst project technical staff.

Coordination of activities amongst the project components, institutions, and projects involved, as well as amongst the projects, organizations, indigenous, latinos, and afro-colonial communities should be promoted through open communication to ensure the integration of all individual efforts in a more coherent regional strategy.

5.5 Follow-up of Activities

Project implementation has defined training, monitoring, and protection strategies aimed at the communities and protected areas. The outcome of these activities has raised expectations amongst several beneficiaries, regarding additional training, management, and scope, surpassing the original objectives. This situation, due to the absence of a comprehensive strategy in the project design has limited the development of structured operational plans, following definite standards on implementation, coordination, monitoring, follow-up, regular process assessment, feedback, and necessary reformulation at the different levels of the activities.

Training activities on several subjects have fallen short due to limited equipment to put into practice the newly acquired skills and knowledge. In some cases, training is reduced to the collection of subjects taught on a non-continuous basis.

Overall, the project applies GEF regular follow-up standards (quarterly reports, Tripartite Committee Report). However, the creation of mechanisms to ensure follow-up and the integration of different components and activities on a regular basis is recommended for strengthening the latter in the communities, through local and trained capacities.

5.6 Assessment

A characteristic in this type of projects is the absence of an assessment system. Regular meetings, which usually become information updates, are a limited means for determining quality and scope of developed programs. Reports based on field logs and other data collection means, meetings, activities, locations, and beneficiaries have a limited purpose—they are used as entries in general management reports.

Lack of indicators or clearly defined assessment mechanisms is a deficiency in project design. The way in which progress and outcome is assessed can fairly contribute to management feedback, and could, in some cases, be based on the individual or subjective judgement of the people carrying it out.

Activities carried out in the communities can be subject to regular assessment, as collective participation and monitoring of community interests are involved. This process, however, is not reflected in the project comprehensive implementation/assessment efforts.

Summary of the Work Processes of Project BioDarien

Design	The initial project design was based on identifying difficulties, followed by a period of consultations and passive community participation, to finally define objectives, activities, and an organizational structure. The second period included project reformulation based on assessing the previous period, with fewer participation of the key stakeholders; however, with moderate objectives aimed at drawing them closer to the regional reality.
Execution	The second two-year period concentrated time and efforts to regain the communities' trust and to define potential areas for developing activities. In 18 months, three (3) communities were benefited with the execution of the micro-credit programme; the DNP extended its infrastructure, database and signposting; training sessions were started; interinstitutional relations were strengthened.
Financial Management	During the first period (1994-1998), budget execution presented poor control mechanisms due to difficulties in project implementation. In several occasions, audits noted the absence of proof of expenses. The Reformulated Project included more efficient financial controls, notwithstanding, accounting cash-assets entries require regular monitoring without slowing down execution.
Management and Coordination Mechanisms	The BioDarien project has not defined joint methods for integrating and planning the components of the programs and projects developed in the region. In the communities, only the indigenous people, through the Indigenous Council, have set participatory and management project mechanisms. During the second period, efforts were aimed at coordinating with other projects and institutions promoting environmental or community-development in Darien, as part of ANAM's operations and the IDB/MEF Sustainable Development Program. Specific coordination activities are more frequent among the projects' technical teams.
Monitoring and Assessment	Overall, the project applies GEF regular follow-up and assessment standards (quarterly reports, Tripartite Committee Report). However, the creation of mechanisms to ensure follow-up and integration of the different components and activities based on continuous processes is recommended. Current Annual Operational Plans lack follow-up mechanisms.

6. Conclusions and Recommendations

6.1 Specific Objectives of Project BioDarien

Conclusions

1. Participatory planning in Darien protected areas:

Notwithstanding Project BioDarien contribution in collecting and classifying scientific data, developing participatory planning activities in three communities through MOFEC, and coordinating activities between institutions and projects, it is still necessary to develop an integrated strategy for the protected areas in the region, including, among others, strategic alliances, financing, management plans, and holding agreements with the Embera-Wounaan Indigenous Council.

2. Strengthening activities in Darien's protected areas:

Without underestimating project training and infrastructure changes, integration and follow-up necessary to significantly contribute in participatory planning and managing protected areas in Darien is non-existent.

3. Hands-on projects for sustainable use of natural wild resources:

The project was successful in this area, since it was able to develop a micro-credit programme in three communities, providing technical training in organic agriculture, thus setting the basis for activities of sustainable use in the area. Early experiences in implementing MOFEC should be thoroughly examined in order to use this model in other opportunities. To ensure replicating the efforts in other communities, it is necessary to set follow-up mechanisms, especially regarding technical support, product trading, conflict resolution, and strategic alliances.

4. To raise awareness in local communities and promote the value of natural resources:

Experiences on raising awareness through radio programmes and environmental education activities in public schools have great potential; however, without follow-up mechanisms, there is no significant impact on public opinion. In addition, changes in attitude cannot be measured without definite indicators or assessment studies.

5. To increase and diversify the financial resources basis:

The project surpassed expectations in this area, as it established a financial basis in the community at the operational and institutional levels. However, it is necessary to define a financial plan for the protected areas in the region.

6. To increase knowledge of Darien's local population on natural resources in the protected areas:

According to indicators set in the 1998 project document, the project financially supported scientific research in DNP, and further dissemination in El Real (DNP headquarters), and developed a database to classify bibliographical information on Darien. Notwithstanding fulfilling part of the expected activities, better management planning and more integration is necessary.

Recommendations

1. To develop and implement a strategy and regional action plan aimed at Darien's conservation and sustainable development, including a clearly defined plan for the protected areas:

Specific activities for the responsible officer:

To examine current plans, such as the national study on biodiversity, strategy and national action plan for biodiversity in order to set a regional programme as a component of the national planning process (ANAM, associated projects).

To develop a regional strategy to include strategic alliances, management plans for the protected areas, holding agreements with the Embera-Wounaan Indigenous Council, and local community participation. The strategy should also foresee a plan for developing protected areas, assigning a permanent technical staff, equipment, infrastructure, operational costs, income sources, and long-term financing (ANAM, associated projects).

2. To develop a system and extend the use of MOFEC within a regional strategy aimed at the conservation of Darien's biodiversity.

Specific activities for the responsible officer:

To draft a report, classifying MOFEC experiences in Punta Grande, Canglon, and Santa Librada according to quantitative and qualitative terms (technical team).

To develop a plan aimed at extending MOFEC, defining communities and activities for transforming the model into the basis for organized community participation and co-management (technical team).

3. To ensure follow-up and coordination of environmental education programs through alliances with other government agencies.

Specific activities for the responsible officer:

To classify experiences in preparing radio programmes in the Embera language and identify organizations to provide follow-up beyond the BioDarien context (technical team).

To set an action plan for updating/distributing educational guidelines in Darien schools, including follow-up mechanisms for teacher training and coordination between the Ministry of Education and ANAM (UNDP, Environmental Education Department of the Ministry of Education, ANAM, technical team).

6.2 Community-based Participation

Conclusions

Overall, the project promoted participatory activities in the communities (MOFEC) and institutions. There is need, however, to develop more activities within planning and designing a participatory co-management programme for the protected areas.

Recommendations

1. To develop and implement a participatory community plan for co-management.

Specific activities for the responsible officer:

To prepare a diagnosis on community participatory potential and identify five to ten communities for pilot activities (technical team, indigenous councils).

To define rights and responsibilities between the indigenous *comarcas* and government on co-management of protected areas, focusing on overlapping areas (Embera-Wounaan Indigenous Council, technical team, ANAM).

To set cooperation standards and co-responsibilities between the DNP technical staff and General Embera-Wounaan Indigenous Council ecological supervisors with clearly defined duties (ANAM, General Embera-Wounaan Indigenous Council).

2. To set and implement participatory standards, design, execution, monitoring, and activities assessment in the co-management project.

Specific activities for the responsible officer:

To define decision-making standards amongst ANAM, General Embera-Wounaan Indigenous Council, and the technical staff within the Darien Co-management project (technical staff, ANAM, General Embera-Wounaan Indigenous Council).

To set control areas in the co-management program, considering ANAM, UNDP, and General Embera-Wounaan Indigenous Council responsibilities and rights (technical staff, ANAM, General Embera-Wounaan Indigenous Council).

To set procedures for conflict resolution (technical staff, UNDP, ANAM, General Embera-Wounaan Indigenous Council).

6.3 Institutional Strengthening

Conclusions

The project carried out training activities for the DNP staff and public school teachers in El Real. However, developing an integrated training programme targeted at technicians, meeting the needs and setting follow-up is recommended.

Both executing agencies, ANAM and UNDP, supported the project, thus preventing unnecessary political or bureaucratic difficulties.

ANAM has made progress since its creation in 1998; however, more technical staff is needed at the regional office in Meteti and DNP headquarters in El Real.

UNDP established a liaison office in Yaviza, thus speeding work processes in the region. There is need for greater integration of international project activities in the region.

Recommendations

1. To include a technical training programme for DNP personnel and the two *Comarcas* in Darien's biodiversity conservation and sustainable development leading plan, considering the outcome of the Strengths, Opportunities, Weaknesses, and Threats method used in September 2000 (UNDP, technical staff, ANAM, associated projects).
2. To appoint technical specialists for managing the protected areas at the regional office in Meteti and DNP headquarters (ANAM).
3. To strengthen coordination and integration efforts of international projects in Darien through the liaison office in Yaviza (UNDP, associated projects).

6.4 Baseline

Conclusions

A baseline, giving priority to secondary information on ecological diversity in the region and without definite elements on socio-cultural diversity of the various human settlements in Darien limit the process aimed at integrating, in a harmonious manner, community development with available natural resources. Therefore, understanding that the relationship already exists and is different in each case is fundamental.

Recommendations

1. To reformulate the baseline, taking into consideration socio-economic and cultural criteria, as well as ecological data (ANAM, technical unit, associated projects).
2. To review and update available socio-economic and environmental data in Darien, underscoring the social and ecological impact of the logging industry in the region (ANAM).

6.5 Design

Conclusions

To a great extent, the project reformulation process has prompted a successful second phase by clearly defining a work area, setting specific objectives, and several indicators in the logframe matrix. The initial phase design was participatory, however, lacked follow-up. Participatory analysis resulted in people's raised expectations in the communities involved without further providing definite solutions. In addition, the initial design was not very operational, thus, the first technical unit hesitated on how to implement it.

The original design was intended for an extensive region with human settlements concentrated in various subregions, but of different background, without any definite areas or specific group, thus, implementation was limited.

Upon consultations, resulting in the reformulation of the project, the staff in charge of developing activities in 1999-2000, after drawing closer to the communities, gave priority only to activities with

fundamental characteristics, such as some level of organization, necessary to begin the micro-credit model.

Notwithstanding the abovementioned, BioDarien's second phase clearly showed that small projects can yield definite results while other initiatives with stronger financial support have difficulties due to limited operational mechanisms for community work.

Recommendations

1. To develop a leading plan for the project, defining parameters for participation, follow-up, and assessment as abovementioned through territorial programmes to facilitate the integration of technical areas (technical staff, UNDP, ANAM, General Embera-Wounaan Indigenous Council).
2. To develop detailed standards in GEF supported project design, including specific criteria for integrating GEF multiple support phases, community participation, follow-up (indicators), and assessment (GEF).

6.6 Execution and Coordination

Conclusions

The same project staff members, General Coordinator, Administrator, and Component Coordinators have been involved in the project from the very beginning - an important achievement when compared to the previous stage - allowing continuity of the process and image promotion in the communities.

An important element in the execution of Project BioDarien during the evaluation mission was the presence of a technical unit, experienced in the region; with extensive understanding of the population's socio-cultural characteristics and profile meeting the demands of the circumstances and responsibilities; as well as committed beyond the fulfilment of duties.

In 18 months, the technical unit recovered the trust of targeted communities, which was one of the main objectives when re-launching the project, removing the negative image from the previous stage. The new approach, including open communication between the new staff members and the communities was a key element in achieving the acceptance of Project BioDarien.

We believe the project is has managed to build a strong team, aimed at coordinating activities with both government (including international projects) and non-government sectors. Therefore, contracting the same technical staff will strengthen the co-management project. To this end, managerial processes could be included into a system to make its performance more efficient.

Recommendations

1. To develop and put into practice a managerial system, integrating administrative and technical components in the co-management project.

Specific activities for the responsible officer:

To develop an intranet-based managerial data system with computer interconnections and easy-access log-in log-out mechanisms. A good telephone line connection between Yaviza and Panama City is

fundamental to keep the system working, as well as a timely technical maintenance plan (technical team).

To develop an interactive database, integrating technical and administrative information. To maintain the database in a web page for internal use. Using the system developed by the GEF/SGP could be considered (technical team).

To follow a flexible planning process, using AOPs as a tool for classifying and reviewing previous cycles (see follow-up and assessment). To develop activities, included in the AOPs, with ANAM's technical unit and the Embera-Wounaan Indigenous Council to the extent that both groups are willing to participate (technical team).

2. To set the basis for dialogue, decision-making standards, and procedures for solving conflict at different committee levels: monitoring, project, and community/subwatershed.

Specific activities for the responsible officer:

To set the basis for dialogue according to various levels, including standards for decision-making, and conflict resolution (technical team, ANAM, UNDP, Embera-Wounaan Indigenous Council).

To ensure smooth communication between the parties involved through electronic media (e-mail, internet, etc.), regular meetings, and field visits. The goal should be to "speed up performance without bureaucracy" (technical team, ANAM, UNDP, General Embera-Wounaan Indigenous Council).

3. To create horizontal structures, using territorial programmes.

Specific activities for the responsible officer:

To establish/maintain a simple level hierarchy, including committees for monitoring, management, technical areas, subregional committees (hydrographical subwatersheds), and communitarian committees. Defining responsibilities and standards for decision-making at each level prompt the creation of semi-autonomous levels, thus implementing activities becomes smoother and flexible.

To develop territorial programmes per subregion or geographical area, integrating activities from the various project components.

6.7 Financial Management

Conclusions

Recent project audits (1999) confirmed that financial statement reports followed generally accepted accounting standards. It was noted, however, that income, expenses, and budget execution were entered on a cash-assets basis, which is an accounting standard different from the one generally accepted.

Accounting standards used in this type of project limit analysis per project component (promotion, protection, indigenous people coordination), as well as financial allocations for activities of the liaison office in Panama City (coordination meetings, contacts, etc.), and field activities per area or group of communities.

Personnel and operational expenses represent approximately 56.6% of the total budget initially allocated, while field activities represent 43.4%.

Recommendations

1. Since operations and disbursements are made in cash, similar projects should set mechanisms for in-house audits on a regular basis.

Specific actions for the responsible officer:

To develop an accounts monitoring system aimed at technical audits on a regular basis without preventing or slowing the process. (Management, Auditors).

2. To develop mechanisms to direct more resources toward the project regional base, especially upon a more effective programme implementation and recovering the trust of the communities. The resources should be allocated according to each component to further make assessments based on such standards.

Specific actions for the responsible officer:

To allocate more resources aimed at implementing field activities, integrating more communities in keeping with operational plans and set financially efficient impact indicators. (Coordination, Management).

To develop mechanisms for recording budget execution based on project components. (Management).

6.8 Follow-up and Assessment

Conclusions

Notwithstanding having fulfilled assessment requirements set in the UNDP and GEF design, such as Project Implementation Reviews (PIRs) and tripartite evaluations, the project was unable to develop an in-house participatory assessment system to promote work feedback. Therefore, we believe that

participatory projects demand follow-up and reviewing mechanisms on a regular basis to meet the objectives and deal with unforeseen changes.

Recommendations

1. To develop and implement a follow-up programme within the Annual Operational Plans (AOPs).

Specific actions for the responsible officer:

To develop specific qualitative and quantitative participatory indicators for immediate project objectives (technical team).

To set a managerial plan based on interactive data, classifying project information, according to set quantitative and qualitative indicators (technical team).

To examine the possibility of integrating specific responsibilities in project management (co-management) aimed at monitoring and reviewing performance on a regular basis in keeping with set indicators (technical team).

To hold monthly meetings for sharing experiences, coordinating, assessing, and adjusting activities based on results of the previous cycle and execution plan (technical team).

2. To develop and implement a participatory assessment programme on a regular basis in the AOPs.

Specific actions for the responsible officer:

To develop a participatory assessment programme on a regular basis, using the Strengths, Opportunities, Weaknesses, and Threats method (technical team).

To hold participatory workshops, implementing this method at the local level in communities, parks, etc. (technical team).

To classify collected data into a database (technical team).

3. To develop single indicators for the region as components of a leading conservation and sustainable development plan in Darien.

Specific actions for the responsible officer:

To hold a seminar/workshop on developing ecological, social, economic, and cultural indicators for Darien (UNDP, ANAM, General Embera-Wounaan Indigenous Council, associated projects).

To set a database or any other system of indicators in ANAM's web page or any other site agreed amongst the parties involved (UNDP, ANAM, General Embera-Wounaan Indigenous Council, associated projects).

To hold regular workshops to update/adjust indicators based on field experiences (UNDP, ANAM, General Embera-Wounaan Indigenous Council, associated projects).

To carry out consultations on a regular basis in the communities to strengthen the development of indicators (technical team).

Summary of Recommendations

Component/Topic	Recommendations
Objectives	<ul style="list-style-type: none"> • To develop and execute a regional strategy and action plan aimed at Darien's conservation and sustainable development, including a specific plan for the protected areas • To develop a system and extend MOFEC within the context of a regional strategy to conserve Darien's biodiversity. • To ensure follow-up and coordinate environmental education programmes through alliances with other government institutions.
Community Participation	<ul style="list-style-type: none"> • To develop and implement a co-management participatory community programme. • To set and put into practice participatory standards in project design, implementation, monitoring, and activities assessment (co-management).
Institutional Strengthening	<ul style="list-style-type: none"> • To develop a technical training programme for DNP staff and the two <i>Comarcas</i>. • To appoint a team of technical specialists to manage the protected areas. • To strengthen coordination and integration of international projects.
Baseline	<ul style="list-style-type: none"> • To reformulate the baseline according to socio-economic and cultural criteria and ecological data. • To review and update available data on socio-economic and environmental issues in Darien, underscoring social and ecological impact of the logging industry in the region.
Design	<ul style="list-style-type: none"> • To develop a leading plan (project document), defining participation, follow-up, and evaluation parameters through territorial programmes. • To formulate detailed guidelines for GEF sponsored projects, community participation, follow-up (indicators), and assessment.
Execution and Coordination	<ul style="list-style-type: none"> • To design and implement a managerial system, integrating co-management project administrative and technical components. • To promote dialogue, decision-making, and conflict resolution processes. • To develop a horizontal structural organization, using territorial programmes.
Financial Management	<ul style="list-style-type: none"> • To set in-house mechanisms for technical audits on a more regular basis. • To develop mechanisms aimed at directing more resources toward the project base region.
Monitoring and Assessment	<ul style="list-style-type: none"> • To develop and execute a follow-up programme as part of AOPs. • To establish and implement a participatory assessment programme on a regular basis under AOPs. • To develop single indicators at the regional level as components of a leading conservation and development plan for Darien.

7. Lessons Learned

Component	Remarks
Design	<ul style="list-style-type: none">• Small projects can yield important and definite short-term results.• Project design should define participation, follow-up, decision-making, assessment, and coordination details. The general design as presented in the project document does not provide such details, thus making it difficult to implement.• Participatory analysis is fundamental in project planning; however, it could seriously impact project credibility if follow-up is not established.
Implementation	<ul style="list-style-type: none">• Maintaining a stable and capable team is fundamental to efficiently carry out the activities.
Follow-up and Assessment	<ul style="list-style-type: none">• Both these processes demand clearly defined indicators, including socio-cultural and ecological criteria to facilitate assessing project impact.
Baseline	<ul style="list-style-type: none">• The baseline should include socio-economic, cultural, and ecological criteria.
Community-based Participation	<ul style="list-style-type: none">• Early consultations is a step prior to participation, opening possibilities for developing democratic process at the various levels and ensure respect toward the communities.
Coordination	<ul style="list-style-type: none">• Project performance significantly improves as the implementing agencies allow some level of autonomy (under monitoring) and a clearly defined technical (not political) approach is followed.
Best Practices	<ul style="list-style-type: none">• The ethno-cultural financing model has great potential, according to three successful experiences.

8. Annexes

8.1. Terms of Reference

TERMS OF REFERENCE
FINAL INDEPENDENT EVALUATION
PAN/94/G31, CONSERVATION OF BIODIVERSITY IN DARIEN THROUGH
SUSTAINABLE COMMUNITY DEVELOPMENT, PANAMA

(6 April 2001)

BACKGROUND

Project BioDarien (PAN/94/G31), began implementation in 1995. This is a complex project, which originally covered more than a million Ha., multi-ethnic beneficiaries, four main components (protection, promotion, research and capacity building), little institutional presence and a population with limited capacity for utilization of external resources. Darien is the easternmost province of Panama and it has traditionally being isolated from the development of the rest of the country. A dirt road was first opened during the 60s, which is still closed for several months of the year, during the rainy season. This resulted in difficulties for the implementation of the project and rotation of technical and administrative staff, which was interpreted by beneficiaries as lack of stability and consistency. After three years of implementation, the project was evaluated and reformulated in 1998. A new team was recruited after living and working conditions were improved at the project site. The scope of the project and the area to be covered were reduced in order to increase the impact of project activities and the possibilities for full participation of stakeholders. Beneficiaries were extensively consulted and the project objectives and approach were explained in order to receive feedback regarding their perception of a protected area and their expectations from project implementation. Project field activities were re-initiated in late 1998 and full implementation covered all of 1999 and 2000. The project was extended for three months (January-March 2001) with funding from the UNDP Office in Panama in an effort to link its activities with those of a new project approved by UNF (Co-management of the Darien National Park and World Heritage Site - Panama), which builds on windows of opportunity identified during implementation of Project BioDarien.

OBJECTIVES OF THE EVALUATION

The GEF requires that every completed project have a final evaluation. The evaluation should assess whether the project, particularly after the substantive reformulation in 1998, reached its objectives and its relative impact on the biodiversity of the Darien region and on the living conditions of the communities affected by the implementation of the project. Furthermore, the evaluation should cover the degree of completion of programmed project activities and the achievement of expected project outputs at the end of project activities. The evaluation should also identify and analyse issues pertaining to the relevance and success of the project on the basis of the indicators from the logframe matrix in the Project Document.

The evaluation should also try to analyse the receptivity and acceptance of the local populations regarding this and other conservation and sustainable development projects operating in the area, the local conditions for the implementation of this type of initiatives and the commitment of national and local authorities with conservation of the Darien's biodiversity. The evaluation should give relevant

information regarding the existence and potential of any measures in place that ensure sustainability of project results.

STAKEHOLDERS

The main stakeholders of the evaluation are government authorities at national, regional and local level, the indigenous and other local governments relevant to project implementation, the community groups and other organized groups who participated and/or were affected during the implementation of Project BioDarien, relevant NGOs and other programs and projects operating in the area.

METHODOLOGY

The methodology for the implementation of this evaluation will include documentation review, interviews with relevant stakeholders in Panama City and at the project site, and field visits with highly participatory meetings. Stakeholders to be interviewed will include representatives from all participating beneficiary groups, government institutions and NGO's, as well as local governments and local indigenous councils. The indicators of success of the logframe matrix and the baseline conditions, both in the original project document, will be the reference for the assessment of project impact. The evaluation will be carried out by a team of two consultants, independent from the formulation/implementation of the project, one whose expertise is biodiversity conservation and one whose major field of experience is community development, with strong social science background and knowledge of social rapid assessments.

The consultants will undertake a substantive review of the above-mentioned project as per these Terms of Reference.

IMPLEMENTATION ARRANGEMENTS

The consultants' responsibilities will be carried out with the support of the UNDP Country Office in Panama in order to facilitate access to all stakeholders, government and non-government officials, communities and other information sources, which the consultants consider relevant for the appropriate evaluation of this project. The consultants will be briefed at the beginning of the evaluation process by the UNDP Office in Panama and will have permanent access and support from project staff during the implementation of this evaluation. The responsibilities described below will be performed during 10 days as per the timeframe table included as part of these terms of reference.

TASKS

1. Review and analyse all relevant project related information, which will be either supplied or made accessible by the UNDP Country Office in Panama. Attend briefing with relevant stakeholders, regarding project context and antecedents and project implementation experiences;
2. Review and analyse relevant GEF guidance, with specific attention to eligibility criteria for biodiversity conservation projects in forest ecosystems (GEF Operational Strategy and Operation Programme #3).
3. Travel to the project site and conduct consultations with local stakeholders to a) obtain a personal assessment of relevant contextual challenges faced during project implementation and how these were approached by the project implementation team.
4. Evaluate the degree of advance/completion of project activities and achievement of expected outcomes, according to the reformulated project document, its objectives and the indicators contained in the logframe matrix.
5. Evaluate the capacity to liase and to achieve critical synergies and linkages with other conservation and development initiatives operating in Darien. Evaluate the existence and degree

- of effectiveness of coordination efforts of the project with ANAM and other government institutions, national, regional and local NGOs and other programs and projects with activities in the area of the project like the IDB Darien Sustainable Development Programme and the WB-GEF Central American Biological Corridor, among others.
6. Estimate the impact of the above-mentioned activities in the conservation and quality of the forest ecosystems of the Darien region, especially those contained in and around the Darien National Park.
 7. Evaluate the degree of participation, acceptance and motivation of relevant stakeholders in the vicinity of the Darien National Park, related to the project activities and sustainable development strategies and approach. This includes field visits and meetings with representatives of indigenous and other local governments, community-based and non-government organizations.
 8. Evaluate the impact of the project regarding capacity building of the National Environmental Authority of Panama, ANAM, as it relates to conservation and sustainable development of the Darien region.
 9. Evaluate performance of UNDP and national counterpart agencies, as well as country drivenness, during project design and implementation
 10. Estimate the extent to which the project will become sustainable; factors affecting sustainability: political, institutional, economic and financial, technological, socio-cultural, and environmental. Estimate the possibilities for replicability of the approach.
 11. Assess the risk and threat analysis affecting the project and biodiversity conservation, compared to initial project document.
 12. Meet and interview with the Project technical and administrative staff and also with relevant representatives from government institutions, NGOs, indigenous councils and local governments related to the implementation of the project.

OUTPUTS

1. A substantive evaluation report to the UNDP Country Office in Panama, relating the degree of completion of expected project outcomes as per the project document and the possible causes for project failures or lack of positive expected results.
2. A synthesis of all interviews and meetings held during the implementation of the independent evaluation of the project.
3. A synthesis of key lessons learned and best practices as a result of project implementation and how they may be used in the future in Darien, other parts of the country or other regions, by governments, the GEF and other cooperation entities.
4. A section with recommendations for actions to be taken in the future regarding biodiversity conservation and sustainable development in the Darien National Park and its critical area of influence.

8.2 Mission Report

Date/Time	Location	Consultation/Activities with Organizations/People
May 2, 2001	Panama City	Arrival of Peter Wilshusen
May 3, 2001 8:00-11:30	Panama City	Meeting with team of evaluators, El Panama Hotel (Sanabria). Meeting with Gonzalo Menéndez G., ANAM Deputy Director, and National Director of the Project BioDarien.
13:00-14:30		Meeting with Yolanda Jimenez, Fondo Natura.
16:30-17:30		Meeting with Roberto Carrillo, UNDP-Panama Programme Officer and Eric Solis, Project BioDarien Manager Meeting with Ms. Elizabeth Fong, UNDP/Panama Resident Representative (Carrillo).
17:30-18:00		
May 4, 2001 9:00-10:30	Panama City	Meeting with Eligio and Beatriz Garcia, Dobbo Yala Foundation Meeting with Eric Solis, Project BioDarien Manager Meeting with Lider Sucre, Executive Director and Javier Guerrero, Head of ANCON Programs in Darien.
11:00-12:30 2:30-3:30		
May 5, 2001	Panama City Meteti Yaviza	From Panama City to Meteti by road Meeting with ANAM Regional Director, Province of Darien Meeting with Canglon & Santa Librada Credit Committees Trip to Yaviza by road.
May 6, 2001	Yaviza Punta Grande (Tupiza River)	From Yaviza to Punta Grande by boat Meeting with (MOFEC) credit group and Tupiza River Committee (environmental cleansing). Visit to plantain organic farm. Return to Yaviza by boat. Meeting with Alfonso Moreno, MIRA-ProDarien.
May 7, 2001	Yaviza El Real Rancho Frio, DNP	From Yaviza to El Real by boat. Trip to Rancho Frio, Darien National Park Meeting with DNP Director and rangers Walk through the nature trail.
May 8, 2001	El Real Yaviza	Return to El Real Meeting with DNP staff and data base presentation Meeting with Prof. Rosario, Emilia Valdelamar School, (environmental education) Return from El Real to Yaviza.

Date/Time	Location	Consultation/Activities with Organizations/People
May 9, 2001	Yaviza	From Yaviza to El Real
16:00-18:00	El Real Panama City	Trip from El Real-Sambu-Panama City Meeting with Maria Vasquez, Carlos Espinoza, Beatriz Schmidt—IDB Darien Sustainable Development Program.
May 10, 2001	Panama City	Meeting with Embera-Wounaan Indigenous Council representatives
9:00-11:00		Meeting with Ivan Valdespino, Manager, Executing Unit, Mesoamerican Biological Corridor
12:00-13:00		Meeting with Mirei Endara, The Nature Conservancy.
15:00-16:30		
May 11, 2001	Panama City	Final Report Draft.
May 12, 2001	Panama City	Final Report Draft.
May 13, 2001	Panama City	Final Report Draft.
May 14, 2001	Panama City	Final Report Draft.
14:30		Report submitted to UNDP.
May 15, 2001	Panama City	Submission of ANAM Report
9:00		Submission of TU BioDarien Report
15:00		
	Panama City	Mission concludes/Peter Wilshusen returns to USA