

SAVEM Institutional Contract

1996 Annual Work Plan



Submitted to
United States Agency for
International Development
Contract #623-0110-C-00-1040-00

Submitted by
Tropical Research & Development, Inc.
Gainesville, Florida, USA

February 1996

A

ANGAP
Association Nationale pour la Gestion des Aires Protégées
National Association for the Management of Protected Areas

ANGAP Institutional Contract
Annual Work Plan
1996

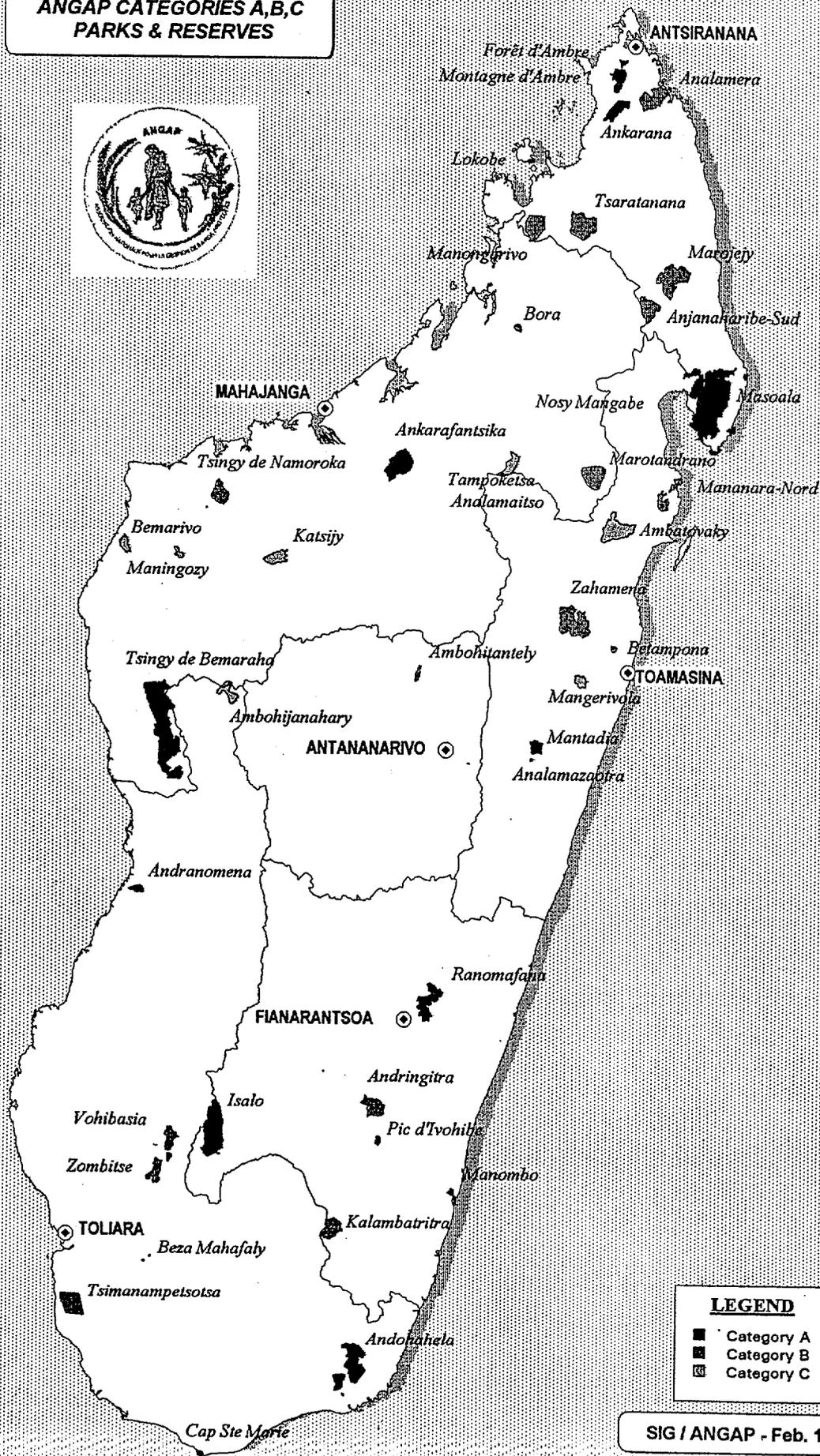
Submitted to
United States Agency for International Development, Madagascar
Contract No. 623-0110-C-00-1041-00

Submitted by
Tropical Research and Development, Inc.
Gainesville, Florida USA

March 1996

B

**ANGAP CATEGORIES A,B,C
PARKS & RESERVES**



LEGEND

- Category A
- ▒ Category B
- ▧ Category C

C

**IUCN CATEGORIES
FOR PARKS & RESERVES**



LEGEND

- National Park
- ▣ Special Reserve
- ▤ Strict National Reserve

Jc

Contents

1. Background	1
1.1. The Biodiversity Crisis in Madagascar	1
1.2. The National Environmental Action Plan and the Environmental Program 2	1
1.3. Toward a National Park Service—the Institutional Development of ANGAP	2
2. The Sustainable Approach for Viable Environment Management Project	4
2.1. Task 1	4
2.2. Task 2	4
2.3. Task 3	5
2.4. Task 4	5
2.5. Task 5	6
2.6. Task 6	7
3. Major Accomplishments through end of 1995	8
3.1. ANGAP Institutional Development	8
3.2. ANGAP, Integrated Conservation and Development Projects and Decentralization Philosophy	11
3.3. ANGAP Monitoring and Evaluation	12
3.4. ANGAP's Protected Areas Information System and its Role as a Biodiversity Conservation Policy Maker	16
4. Reengineering—Reduce Natural Resource Depletion in Target Areas (from SAVEM Project to Strategic Objective 3)	20
5. TR&D Support Activities for each Results Package (RP) through 1996	22
5.1. Results Package 1	22
5.2. Results Package 2	26
5.3. Results Package 5	28
5.4. Results Package 6	37
Annexes	39
Annex 1. 1995 Administrative Support	41
Annex 2. Mahajanga Declaration	59
Annex 3. USAID SAVEM Project Monitoring Indicators	63
Annex 4: Scopes of Work Planned for 1996	79
Annex 5: 1996 Institutional Support	119
Annex 6. Important SAVEM TR&D Project Implementation Issues	125
Annex 7. Support to the Production and Circulation of Information and the Evaluation of NRM Impact	127

E

Acronyms

ANGAP	Association Nationale pour la Gestion des Aires Protegees
CARE	Cooperative for American Relief Everywhere
CI	Conservation International
CITES	International Convention on Trade in Endangered Species
CNRE	Centre National de Recherche Environnementale
DAF	Department of Administration and Finance (of ANGAP)
DEF	Direction des Eaux et Forets
DIVB	Department of Information and Biodiversity Valorization (of ANGAP)
DRHC	Department for Human Resources and Communication (of ANGAP)
DSEP	Departement of Monitoring, Evaluation, and Planning (of ANGAP)
FTM	Foiben Taosarintanin i Madagasikara
GEF	Global Environmental Fund
GIS	Geographic Information System
IUCN	International Union for the Conservation of Nature and Natural Resources
KEPEM	Knowledge and Effective Policies for Environmental Management (USAID project)
NEAP	National Environmental Action Plan
ORSTOM	Institut Francais du Recherche Scientifique pour le Developpement en Coopération
PACT	Private Agencies Cooperating Together
SAVEM	Sustainable Approach for Viable Environment Management (USAID project)
TR&D	Tropical Research and Development, Inc.
UNEP	United Nations Environment Program
USAID	United States Agency for International Development
USGS	United States Geological Survey
WCS	Wildlife Conservation Society
WWF	World Wide Fund for Nature

1. Background

The primary objective of ANGAP's institutional contract is the establishment of this entity with sufficient authority and capability to perform its management functions. Achieving this objective will require the creation of a biodiversity information unit, an integrated conservation and development project (ICDP), and protected-area monitoring and evaluation capability within ANGAP. Tropical Research and Development, Inc. (TR&D) has provided leadership to the association in defining 1) an overall integrated conservation and development project strategy for the protected-area program; 2) the approach to hypothesis testing within integrated conservation and development projects working in Madagascar; 3) the monitoring and evaluation system for ANGAP and the protected-area program; 4) the long-term sustainability of the protected-area program; and 5) the needs assessment and implementation strategy for georeferenced database management systems for biodiversity data. Current contract obligations extend through December 31, 1996, for a total estimated cost of \$6,069,175. The level of effort includes 138 person-months of long-term technical assistance and 40 person-months of short-term technical assistance.

1.1. The Biodiversity Crisis in Madagascar (Extract from SAVEM Project Document)

"Madagascar's natural resource base, upon which the vast majority of Malagasy depend directly, is seriously threatened. The scale and intensity of deforestation, loss of biological diversity, soil erosion and associated declines in overall land productivity are unparalleled. Under present agricultural practices and policies, Madagascar is biologically and physically disintegrating, seriously jeopardizing the continued livelihood of its increasing practices."

"Madagascar has been singled out by the international conservation community as one of the ecologically richest countries of the world, one in which the heritage of biological diversity is most at risk. Biodiversity refers to the variety and complexity of biological systems at all levels, from the genetics of individual species to the species composition and structure of ecosystems. According to the information available, nearly 80% of Madagascar's original forest cover has disappeared or has been severely degraded since man's arrival some 2000 years ago. Within the next 20-40 years, almost all Madagascar's remaining rain forests will be damaged or destroyed unless current trends are reversed. This massive and complete destruction threatens not only biological diversity, but also watershed and soil stability vital to the local agrarian economy." (SAVEM Project Document, ANGAP Institutional Contract, Revised 1994, pp. 1-2.).

1.2. The National Environmental Action Plan and the Environmental Program 2

Until 1990, all forest lands in Madagascar were managed by the Department of Water and Forests (DEF). In 1968, Madagascar adopted the various IUCN (International Union for Conservation of Nature and Natural Resources) categories for protected areas. However, Malagasy officials have always seen protected areas as places to "protect," places to keep

people out of, to “conserve.” Madagascar laws are more restrictive than IUCN worldwide guidelines, despite the fact that Madagascar lacks the economic ability to protect or conserve these areas. Once in place, such laws are difficult to change, even though they are often dysfunctional. The government’s creation of ANGAP illustrates increasing national resolve to protect parks and reserves in a more sustainable manner.

During 1988–89 the government of Madagascar, with international donor support, prepared a National Environmental Action Plan (NEAP) comprised of three five-year phases (Larson, 1994). In 1990 the first phase of the Environmental Program began. Key elements of the plan included delegating responsibility for managing the protected areas and the means to do so. In 1989, early in the preparation phases of the Environmental Program, Louis Berger International and SERDI (a Malagasy firm) defined a legal status for the new organization that would manage Madagascar’s national parks and reserves. Reasons cited for the creation of such an organization included the need for “the development of activities linked to tourists visiting parks and reserves (food services, lodging, guides, various products) (Louis Berger, 1989). This “center” would need to have “great autonomy (from the government) for management” (*Ibid.*). And, “if tourism is to develop into something important in a brief period of time, and if one is to suppose that much of this tourism will be orientated toward nature tourism, then it is necessary to foresee the need for specific new regulations for those sites where tourism has a potential so as to assure a maximum of protection without hindering operators and their clients” (*Ibid.*). This study outlined four major “missions” such an organization should undertake and concluded, after evaluating the various kinds of legal entities (government department, office, various for-profit organizations, private nonprofit organization–association; *Ibid.*) that the status of “association” was the most appropriate for accomplishing the tasks proposed for sustainably managing protected areas. While many of the direct recommendations of this study were not implemented, the resulting organization, ANGAP, was created as an association. Interestingly enough, each of the major mission statements of the initial study have become part of ANGAP’s mission statement for the Environmental Program–phase 2 (EP-2).

1.3. Toward a National Park Service—the Institutional Development of ANGAP

In its first years, ANGAP was given “coordination” responsibility for a system of thirty-nine designated national parks, integrated national reserves, and special reserves—without any direct field management or direct control of the operating funds with which the various operators were to manage these protected areas (annex 3). Also included was one world heritage site—Bemaraha. These thirty-nine protected areas represented only a fraction of the total forest resources under the direct management of the Department of Water and Forests. Until this point, no planner had addressed the need for an actual national parks system. It was assumed that “operators,” granted a type of “coordination” role by ANGAP, would manage the protected areas. Many operators received direct USAID funding through the PACT (Private Agencies Cooperating Together) grants management unit.

As part of Madagascar’s national policy for the gradual disengagement of the state in favor of the private sector assuming greater responsibility, ANGAP was given the legal status of

an association—a statutory body mandated by the state to manage parks and reserves “in the public interest,” to implement the state’s policy for the management of biodiversity, and to create an operational strategy for the conservation and development of protected areas. ANGAP can generate revenue for its operational expenses but cannot distribute profits to its individual members. The highest authority within ANGAP is the National Assembly, followed by its administrative council, and then the director general. The founding members, who compose the present board of directors, represent a balance between the public and private sectors. They include representatives from seven government ministries concerned with environmental issues and six representatives from national and international nongovernmental organizations.

According to Article 2 of its statutes, ANGAP enjoys administrative and financial autonomy. ANGAP, under the Environmental Program legislation and through delegation by the state, is charge with the coordination and execution of the government’s policies concerning the protected areas. During Phase 1 (1990–1995), the strategy called for ANGAP to delegate implementation responsibilities of Integrated Conservation and Development Project (ICDP) field programs to various nongovernmental organization operators (e.g., the World Wildlife Fund [WWF], Conservation International [CI], CARE, VITA). This led, for example, to the World Wildlife Fund being named as “principal operator” for the Amber Mountain complex, supported by the development operator CARE International.

Protected area programs stressed the need for conservation and development to be linked through integrated conservation and development projects and for peripheral zone populations to be involved in the process of protecting these national treasures. Without the communities’ economic interests being linked to the preservation of these protected areas, sustainable conservation was, and is, untenable. The premise, then, was “development for conservation.” The USAID-funded Sustainable Approach for Viable Environment Management (SAVEM) project offered the opportunity to learn the best way to utilize the integrated conservation and development concept in Madagascar, including the hypothesis testing of development–conservation linkages.

2. The Sustainable Approach for Viable Environment Management Project

In 1991, Tropical Research and Development, Inc. (TR&D) was awarded the contract for the institutional development of the newly created "National Association for the Management of [Madagascar's] Protected Areas (ANGAP). TR&D's contractual responsibilities for the institutional development of ANGAP are summarized in the following expected results or task areas by the end of the contract.

2.1. Task 1—

Establishment of a technically and professionally credible role for ANGAP in shaping policy and planning and support in preparing for its long term institutional role in biodiversity conservation in Madagascar.

The strategy adopted to reach these results includes the following three subobjectives:

- (1) Support ANGAP in the clarification and development of medium and long-term objectives, including strategic planning. This includes supporting ANGAP in its evolution toward becoming the Madagascar's national park service and in the related development of ecotourism. This also entails study and possible changes in ANGAP's organizational structure.

Priority has been given to four national parks—Ranomafana, Andasibe, Amber Mountain, and Isalo—with a fifth, Masoala, under consideration as a requisite marine component.

- (2) Support ANGAP in its coordination of the protected area program (currently 42 protected areas) and in its assumption of direct management responsibilities regarding the protected areas.
- (3) Support ANGAP in its implementation of a national policy on biodiversity.

2.2. Task 2—

Development of ANGAP's institutional capacity in administration and finance.

This task includes:

- (1) Augmenting ANGAP's capacity for personnel management. The strategy for accomplishing this goal includes effecting graded salary scales and written (standardized) job descriptions.
- (2) Reinforcing ANGAP's administrative and financial procedures. Steps taken include financial management training and assisting with the development and implementation of a computerized accounting system.

- (3) Strengthening ANGAP's grants management capacity. This includes improving the relationship between ANGAP and the PACT grants management unit—through team building and other activities, as well as focusing ANGAP's grants management in areas consistent with its long-term vision.
- (4) Ensuring ANGAP's financial viability beyond the projected end of donor funding. Efforts made to effect this goal include trust fund development and exploring opportunities for revenue generation, especially from ecotourism.

2.3. Task 3—

Establishment of a system of coordinating activities of individual protected area managers.

This task focused on the establishment of a systemwide monitoring program. Having jointly achieved this, ANGAP and the protected area managers are able to monitor program progress and to make course corrections as needed. Coordination includes communication of results through the protected area program network and through periodic team-building workshops.

Additional efforts have focused on ANGAP developing a "service-oriented" philosophy, rather than one of top-down control.

2.4. Task 4—

Development within ANGAP of a capacity in biodiversity and socioeconomic planning and management, monitoring and evaluation.

2.4.1. Task 4A—

Development of the Capacity for ANGAP to Shape Biodiversity Policy and Planning on behalf of the GRM

Our overall strategy and expected results include:

- (1) The separation of the Department of Information and Valorization of Biodiversity (DIVB) into "information" and "valorization" divisions for biodiversity data management (1995–1996). The information component will remain within ANGAP, while most of the valorization component, relating to biodiversity outside protected areas, will transfer to the DEF, with ANGAP's continuing support (1996–1997).
- (2) The information component will manage all data concerning the protected areas currently coordinated by ANGAP, support protected area biodiversity and monitoring and evaluation activities, and provide data management support to all ANGAP departments (1995–1996). Eventually, this component will become part of a future national park service's "technical unit" (1997–1999).
- (3) The valorization component's biodiversity data management activities will be more national in focus and not limited to the protected areas. Initially this division will

support the DEF's biodiversity unit (1995–1996); subsequently, it will be responsible for all biodiversity data management activities outside protected areas and under DEF responsibility (1996–1997). ANGAP itself will focus its biodiversity data collection and management activities only within the protected area limits and within the defined peripheral zones (1997–1999).

2.4.2. Task 4B—

Development of a capacity to monitor and evaluate the impact of conservation and rural development activities on protected areas.

Our overall strategy and expected results can be summarized as follows:

- (1) Establish a systemwide monitoring system, developed jointly by ANGAP and integrated conservation and development project field operators. This system will respond to biodiversity and socioeconomic monitoring needs of the government, ANGAP, and USAID.
- (2) To accomplish the above, the monitoring and evaluation system will utilize four monitoring indicator levels:
 - a) integrated conservation and development implementation indicators (annual)
 - b) long-term integrated conservation and development impact indicators (annual)
 - c) output indicators (associated with annual work plan activities; semiannual)
 - d) short-term project-activity impact indicators (hypothesis testing)
 - i) socioeconomic surveys on key development activities
 - ii) ecological monitoring of protected areas (indicator species, stream water quality)
- (3) Integrated conservation and development program activities will be monitored to assess impact on:
 - a) the people directly benefiting from project activities, among whom behavioral changes with regard to protected area natural resources are expected, and;
 - b) the protected area.

2.5. Task 5—

Establishment of ANGAP as a source of information and hub of an education and communication network on biodiversity conservation.

Our overall strategy and expected results include communication improvements in three principal areas:

- (1) Among ANGAP and other institutions within Antananarivo (e.g., e-mail links and exchanging of database catalogues with USAID, ORSTOM, FTM);
- (2) Between ANGAP and its protected area network (e.g., packet radio training and maintenance and e-mail links with field operators); and

- (3) Between ANGAP and the general public, nationally and internationally (e.g., ANGAP Hanitriniala quarterly review, posters, calenders, display booths, CD-ROM protected area information, television and radio coverage of important ANGAP conferences and workshops).

2.6. Task 6—

Professional development for ANGAP and ICDP staff in appropriate technical fields.

Our overall strategy for accomplishing this objective and the expected results include:

- (1) Long-term and annual review of ANGAP departments' institutional training needs;
- (2) Planning for and implementation of an annual training program for ANGAP, DEF, and protected area program staff;
- (3) Training emphasis on program planning and management skills; monitoring and evaluation, analysis and reporting; park management and planning; and ecotourism. Most of this will be accomplished in-country. Our training strategy requires that all short-term expatriate personnel be assigned to specific local personnel, who will receive direct "hands-on" training.
- (4) Development of local institutional training capacities in providing in-country training.

3. Major Accomplishments through end of 1995

The year 1995 was a year of outstanding institutional growth for ANGAP. While significant results had been attained in previous years, the past year was exceptional. We would like to highlight a few of these achievements.

3.1. ANGAP Institutional Development

3.1.1. *ANGAP's Mission Statement*

In 1995, ANGAP wrote and adopted a mission statement:

To establish, conserve, and manage in a sustainable manner a network of National Parks and Reserves representative of the biological diversity and the natural environment unique to Madagascar. These protected areas, sources of national pride for both present and future generations, should be places of preservation, education, recreation, and contribute to the development of peripheral zone communities and to regional and national economies.

TR&D's technical advisors for ANGAP, Dr. Richard Swanson and Mr. Jean-Michel Dufils, then assisted ANGAP senior staff develop a realistic plan to fulfill this mission. The first draft of the next five-year plan was completed, with activities and budgets developed under the following headings.

- (1) Establishment of a Network of National Parks and Reserves
- (2) Conservation of a Network of National Parks and Reserves
- (3) Management of a Network of National Parks and Reserves
- (4) The Protected Areas—A Place of Education
- (5) The Protected Areas—A Place of Recreation
- (6) The Protected Areas—A Place for Biological Research
- (7) The Contribution to the Development of Peripheral Zone Communities
- (8) The New Organigram and Statutes Changes Needed
- (9) A Five-year Budget

This plan, called the CAPE program (Composante Aires Protégées et Ecotourism), directs the transformation of ANGAP from its coordination role into the direct management of the protected areas. The integrated conservation and development projects will also undergo transformation, the "conservation" component of these is now recognized as the "park management and ecotourism" component and will be managed by ANGAP.

Nongovernmental organization operators, such as WWF, CARE, and CI, will continue to provide technical support. With the exception of certain development-for-conservation activities (e.g., ecotourism activities, activities funded by park entrance fees, environmental education), protected area "development" activities will be implemented, independent from park management endeavors, through a regional program directed by various nongovernmental and other organizations. ANGAP, as manager of its network of parks and reserves,

will, within each region where it has a presence, be a partner in this regional program approach to sustainable natural resource management.

ANGAP's plan was reviewed by a multidonor evaluation team for the second phase of the Environmental Action Plan (1997—2002) and was considered the best focused document emanating from phase 1 of the plan. Most of its proposed activities were accepted.

3.1.2. *Momentum Increased Toward Becoming Madagascar's National Parks Service*

3.1.2.1. Sister Parks Systems Relationship Established

In 1994, South Africa National Parks Board's Chief Executive, Dr. G.A. Robinson, visited Madagascar. Subsequently, three additional Parks Board directors were sent to Madagascar to support the program. These included the Directors of Finance—Mr. Klasie Havenga, Administration; Mr. Herman Botha, Finance; and Dr. Anthony Hall-Martin, Research and Training. This was followed by 8–12 week training sessions for five future Malagasy park managers, and additional training for ANGAP's Directors of Ecotourism and Park Operations. Plans for continued collaboration during 1996 have been made.

3.1.2.2. Development of Park Management Plans

One major 1995 achievement was the creation of an outline to assist park managers develop park management plans. One of the requisite, initial activities for park management is the development of such a plan. Management plans are tools that help park directors determine problems in and potential for their parks or reserves and efficiently prioritize uses for limited conservation and research resources. Such management plans are not static documents, they are constantly being updated and modified as knowledge accrues or circumstances arise. This park management plan outline will be the foundation for new activities initiated in 1996 and beyond. Park advisor, Scott Grenfel from Ranomafana National Park, and TR&D park advisors provided the leadership behind this emphasis on park management plans.

3.1.2.3. Classification of Parks and Reserves

With direct management of the forty-two protected areas imminent, ANGAP has given serious thought to how such a network should be managed. In 1995 ANGAP began direct management of three parks, including Isalo National Park. To support this effort, a TR&D advisor aided in the preparation of a project document for both USAID and World Bank donor financing. This funding was received in early 1996.

A set of criteria for classifying all parks and reserves was created and applied. Those classified to date are listed below.

Category	Definition	Number of Parks Listed
Category A	Parks and reserves with ecotourism-related revenue-generating potential	9
Category B	Reserves lacking revenue-generating potential, but experiencing significant peripheral zone pressure on resources	19
Category C	Limited revenue-generating potential and insignificant peripheral zone pressure on resources	7

During 1995, technical assistance to ANGAP increasingly focused on ANGAP's evolving role, with the added emphasis on positively impacting local communities (see annex 1, table 3 for details of 1995 short-term technical assistance and table 4 for the various technical reports generated through these efforts).

3.1.2.4. ANGAP and the Peripheral Zones of Protected Areas

A local Malagasy firm, Orgasys, completed a study defining the various relationships that ANGAP might develop with peripheral zones of parks and reserves. The study emphasized the need for clearly defined peripheral and buffer zones.

3.1.2.5. Marketing and Public Relations

In 1995 a great deal was accomplished concerning public relations issues, however, much work remains. Tourist guide associations were created in four parks (Ranomafana, Andasibe, Amber Mountain, Isalo). To fully realize the benefits of competent tourist guides, the first and final contact that tourists have in Madagascar's parks, ANGAP plans to incorporate guide services into park operations—directly employing tourist guides and, therefore, ensuring quality services.

Park uniforms, a symbol of continuity among the parks, have been chosen. ANGAP initiated the move toward an official uniform for all park employees. Adoption of the uniforms is expected in 1996.

ANGAP succeeded in initiating a number of very important public relations and marketing initiatives in 1995. This included the opening of an "ecoshop" in Antananarivo and the creation of a number of products for sale and publicity. These products included a two-year

national parks calendar, pamphlets for the four priority parks, six large format posters, as well as a number of artisanal products made by peripheral zone populations.

In 1995 park entrance fee revenues (50 percent of which is shared with peripheral zone populations, funded various microprojects. This amounted to approximately \$35,000 (annex 3). Results of this revenue sharing are becoming evident—as expected, the economic link between development and conservation is increasing the propensity of peripheral zone populations toward conservation measures and appreciation. In 1996, these efforts will continue, as will ANGAP's monitoring of impacts on the recipient populations.

3.1.3. Training within the Protected Area Program

In 1995 approximately \$131,000 was spent on 78 person-months of in-country and overseas training for ANGAP central-office staff and integrated conservation and development project personnel—resulting in the greatest “training effort” since ANGAP's inception (see annex 1, table 2). Recognizing the importance of such training to the transfer of knowledge and ability, the TR&D 1996 effort will be increased (annex 6, table 6).

3.1.4. National Parks, Tourism, and Financial Sustainability

Ecotourism-development support will continue. This will include short-term technical assistance to local communities for the manufacture and marketing of local crafts and continuing product-quality improvements. A major study is planned to determine what each park has to offer to tourists and to develop new products for local and international markets. In Madagascar the tourism industry is growing exponentially, an average growth 86 percent in 1995 alone, compared with the previous year (annex 3).

In 1996 ANGAP, with the support of the monitoring and evaluation advisor, will begin a chart of accounts for each of the forty-two protected areas (see annex 3). These will show the operating costs of each of the units in the parks network, illustrate the financial needs, and track ANGAP's progress toward financial sustainability. Through the various revenue sources it has identified, ANGAP intends to reach 40 percent sustainability by 2002. In order to achieve this goal, park entrance fees need to be raised and prices set for services rendered within the parks (e.g., camping, guide services, special scenic drives, tour packages).

During the past three years, ANGAP has become genuinely concerned about financial sustainability—the only guarantee of its own long-term existence.

3.2. ANGAP, Integrated Conservation and Development Projects and Decentralization Philosophy

Among the lessons learned concerning the integrated conservation and development projects, and illustrated in Richard Swanson's October 1995 paper, *National Parks and*

Reserves, Madagascar's New Model for Biodiversity Conservation: Lessons Learned Through Integrated Conservation and Development Projects, are:

- (1) The design for the Environmental Program—phase 1 of the integrated conservation and development projects is open to significant improvement.
- (2) The danger of excessive development in the peripheral zones is evident. When funding ends, unsustainable development may prove detrimental, to both peripheral communities and the agency assuming management of development-affected areas.
- (3) The intent of funding a wide range of international nongovernmental organizations to implement a program of integrated conservation and development projects, under the coordination of a national agency (ANGAP), was to facilitate “creative,” strategic approaches. However, because the organizations tended to work “in isolation” from one another, this structure made some parts of the SAVEM program very difficult to implement—including the establishment of a systemwide monitoring program and setting up baseline, georeferenced databases for long-term spatial monitoring. The integrated conservation and development projects tended to focus on short-term, life-of-project efforts, without regard for the long-term needs of the program—revealing the possible benefits of a centrally managed contracting mechanism.
- (4) Government decentralization continues to be a paramount issue in Madagascar—certain to intensify in 1996 and beyond. For ANGAP this trend provides opportunities and challenges. The challenge is that provinces will want to take control of national parks and reserves for themselves—seeing their potential for economical profit. ANGAP will need to continue to defend the need for a national network of parks, while at the same time encouraging the creation of regional ones, which could be managed by regions independently. ANGAP also has the opportunity to decentralize the management of its network of parks, permitting them to be more responsive to regional needs. ANGAP has initiated this effort by naming a park director for Isalo, who will be delegated considerable authority for the management of this park.

These, and many other experiences of the past few years, have helped to guide ANGAP as it moves into the next Environmental Action Program phase, beginning January 1997. This has also helped to shape the nature of the transition-phase year (1996), particularly regarding park management, ecotourism development, and peripheral zone communities.

3.3. ANGAP Monitoring and Evaluation

The monitoring and evaluation system put into place under the technical guidance of the TR&D long-term advisor went into operation in 1995, as was evidenced in the “Tables of Indicators” reported by the various SAVEM project operators in their 1995 annual reports. From these data, the USAID assessment of program impact (API) indicators were able to be extracted, (see annex 3).

Use of this ambitious system has revealed areas requiring improvement. Figures 1 and 2 illustrate the existing system and proposed future amendments and improvements.

The implications of this experience are twofold. For the socioeconomic impact monitoring efforts, where the lessons learned from targeted development for conservations activities is essential, TR&D's long-term advisors, with some short-term technical assistance and training support, will give high priority to obtaining summary results for the six SAVEM integrated conservation and development projects and Isalo before the end of the year. For the georeferenced data needed to provide change analysis over time of human pressures on park natural resources, local assistance will be recruited to analyze and digitize the information. TR&D and Tropical Forest Management Trust technical advisors are directly involved in this support.

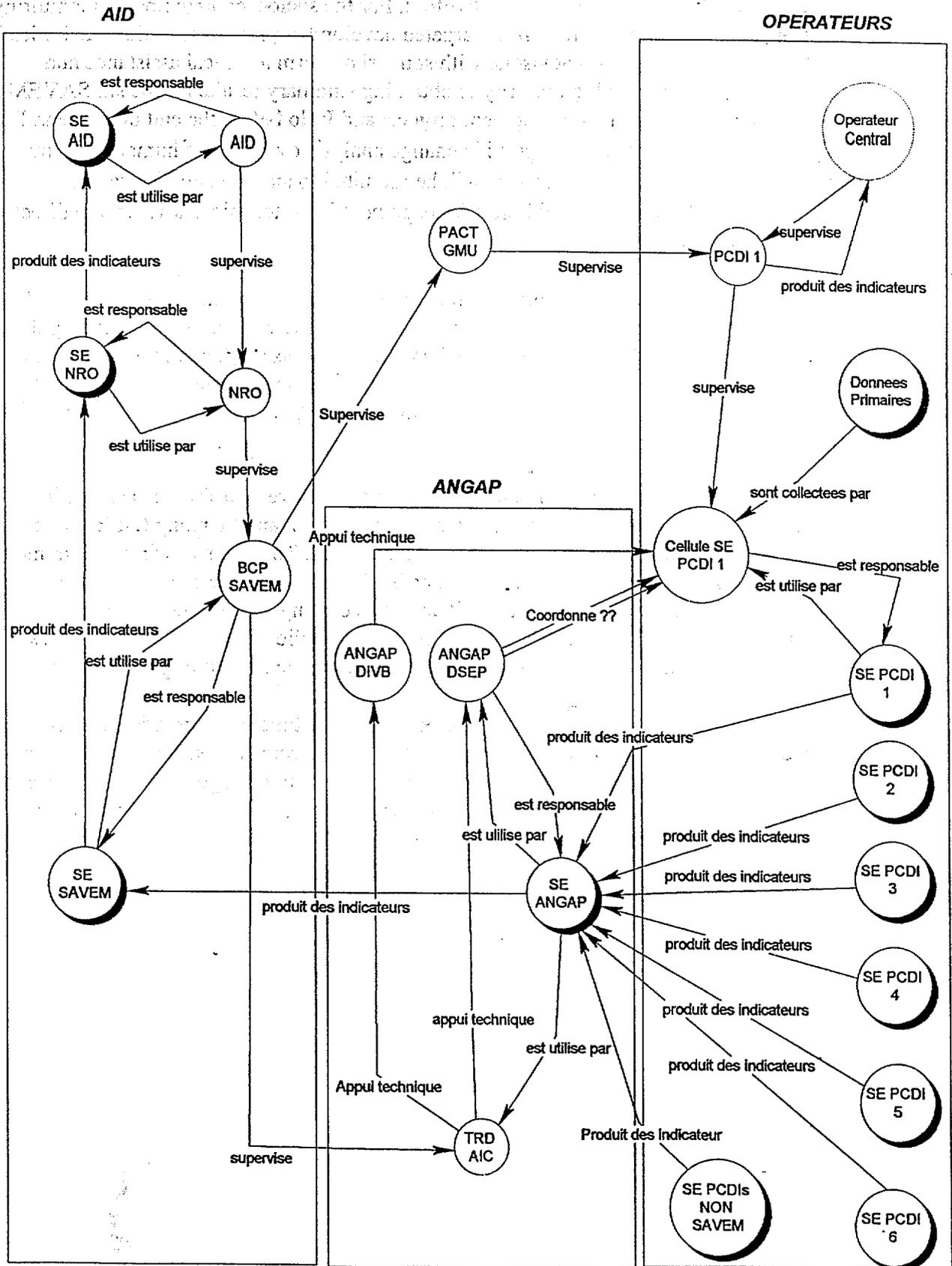
The indicators developed for monitoring the protected area program, will not change. A great deal of thought and effort, on the part of many people, was put into developing these indicators. It is appropriate that ANGAP's DIVB continue using them in the future—even beyond the life of SAVEM. Even if ANGAP is focusing on park management within the protected areas, it still must monitor impact within its peripheral zones of development-related activities.

During the 1996 transition year, monitoring and evaluation responsibilities are being transferred from the Department of Monitoring, Evaluation, and Planning (DSEP) to a division of the DIVB—under different ANGAP directors. This transfer will result in more efficient use of staff and data processing expertise. This will also permit one central ANGAP division, the DIVB, to support all activities dealing with socioeconomic, ecological, and general program data needs, including applied research. This also frees DSEP personnel to move toward the role of an operating department of parks management.

Mr. Dufils (full-time) and Dr. Swanson (50 percent of his time) will provide technical guidance to the DIVB and field units in all ANGAP's protected areas. This relationship is highly complementary, in that, Mr. Dufils's expertise in data management, including spatial georeferencing and computer hardware and software, is combined with Dr. Swanson's field-related skills, including identifying data needs and establishing a monitoring process.

Figure 1:

MONITORING & EVALUATION SAVEM/TR&D AIC
Conceptual Model of Communication Flow
Situation 1995

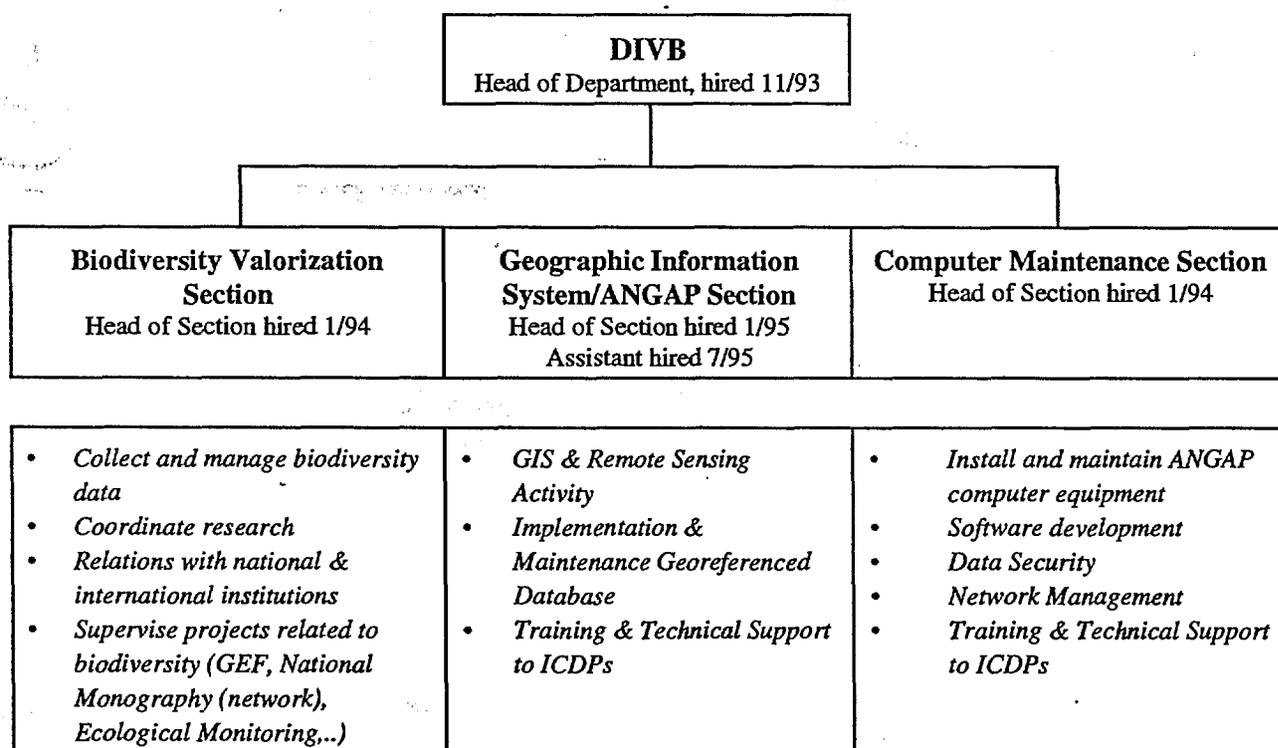


3.4. ANGAP's Protected Areas Information System and its Role as a Biodiversity Conservation Policy Maker

The Department of Information and Biodiversity Valorization made significant progress in 1995. Activities were developed in accordance with the initial strategies defined in 1994 (see DIVB Objectives & Strategies document) :

- Improve information exchange channels by supporting the creation of geographic information users' groups;
- Support the creation of a network of the major national and/or international organizations in charge of biodiversity data in Madagascar;
- Decentralize "primary" data collection, management, and processing to protected area operators;
- Establish a flexible structure allowing progressive implementation of activities; and
- Avoid duplicating activities with national institutions.

The structure and functioning of such a system was completed in 1995.



The three ANGAP DIVB sections work in close collaboration to define and structure the various databases. Efforts in 1996 will include greater merging of this resource with ANGAP's future role as manager of a network of parks and reserves. ANGAP's network of parks should play an important role in providing georeferenced data for various organizations working in the regions surrounding each park. This can be one of the most important partner roles ANGAP will play in the Environmental Program—phase 2.

As part of its restructuring efforts in 1995, and in preparation for the 1996, the decision was made to incorporate the monitoring and evaluation functions of the Department of Monitoring, Evaluation, and Planification into the DIVB. Beginning in 1996, therefore, socioeconomic and ecological monitoring activities will be operated by the DIVB.

3.4.1. Biodiversity Valorization Activities

The DIVB has demonstrated its capacity by developing research activities (e.g., investigations within integrated conservation and development projects), supervising training (e.g., guides, university students) and supervising projects (the most important being the design of a national monography (network) on biodiversity). The initiation of this United Nations Environment Program (UNEP)-funded project was an important activity in 1995.

Relations with several institutions concerned with biodiversity have been established through participation in national and international events :

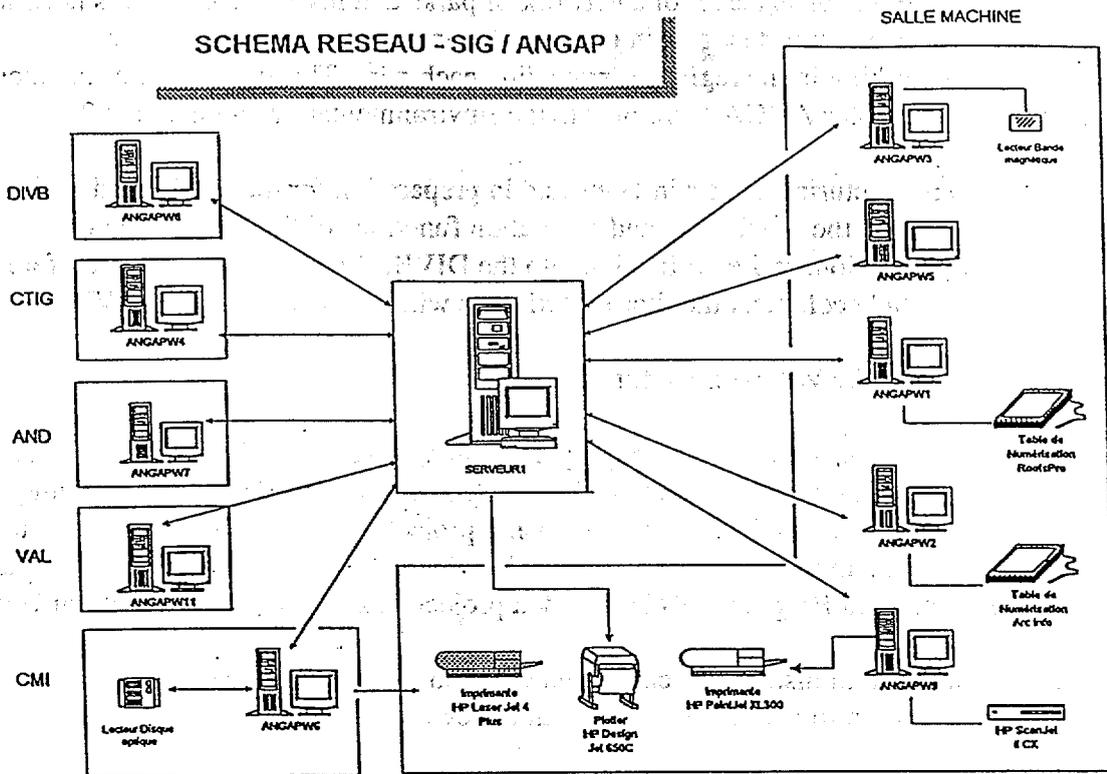
- Pre-Global Environmental Fund (GEF) workshop on the definition of priorities in research and conservation, in collaboration with Conservation International.
- Biological Diversity Day meetings
- Annual CITES meeting
- Annual meeting on Biodiversity Convention
- International Symposium on Madagascar Biogeography

DIVB took part in the Centre National de Recherche Environnementale (CNRE) Scientific Orientation Committee and initiated contact with the IUCN to organize a society for botanists. As part of Environmental Program—phase 2 preparation, the DIVB participated in the working group in charge of designing the project statement for the “coastal and marine environment” component.

3.4.2. Information System

DIVB information-related activities have dramatically increased in the past year. The preliminary work performed in 1994 (e.g., fine tuning the strategic plan, data standardization, inter-institutional contacts, training) enabled the data processing unit to become operational in quickly.

SCHEMA RESEAU - SIG / ANGAP



The first pilot project to collect, manage, and process data (Masoala) was a total success, thanks to effective collaboration with CARE and the Wildlife Conservation Society (WCS). An important outcome of this success is that other integrated conservation and development projects are now interested in developing their capabilities.

The results for 1995 are summarized below:

- The data processing unit is technically operational.
- The DIVB's expertise in georeferenced data management is recognized, allowing the department to play a significant role at national and international levels. The Pre-GEF workshop on the definition of priority zones for research and conservation was a success.
- Significant support was provided to the integrated conservation and development project operators (e.g., materials, technical assistance, training).
- The DIVB drafted specifications for purchasing data from FTM for the integrated conservation and development project operators.
- Georeferenced, aerial video footage of data for monitoring and evaluation was produced. Results are being assessed.

3.4.3. Training

The USAID project has supported DIVB and integrated conservation and development project personnel with valuable training in the following fields:

- Natural resource management and local communities (CIRAD)
- Biodiversity Economical Evaluation (CIRAD)
- Study tour to INBIO
- GIS (CFSIGE, ESRI)
- Remote sensing (CFSIGE, USGS)
- Photo interpretation (CFSIGE)
- GPS (CFSIGE)
- Computer & Network Maintenance (LTI)

4. Reengineering—Reduce Natural Resource Depletion in Target Areas: from SAVEM Project to Strategic Objective 3

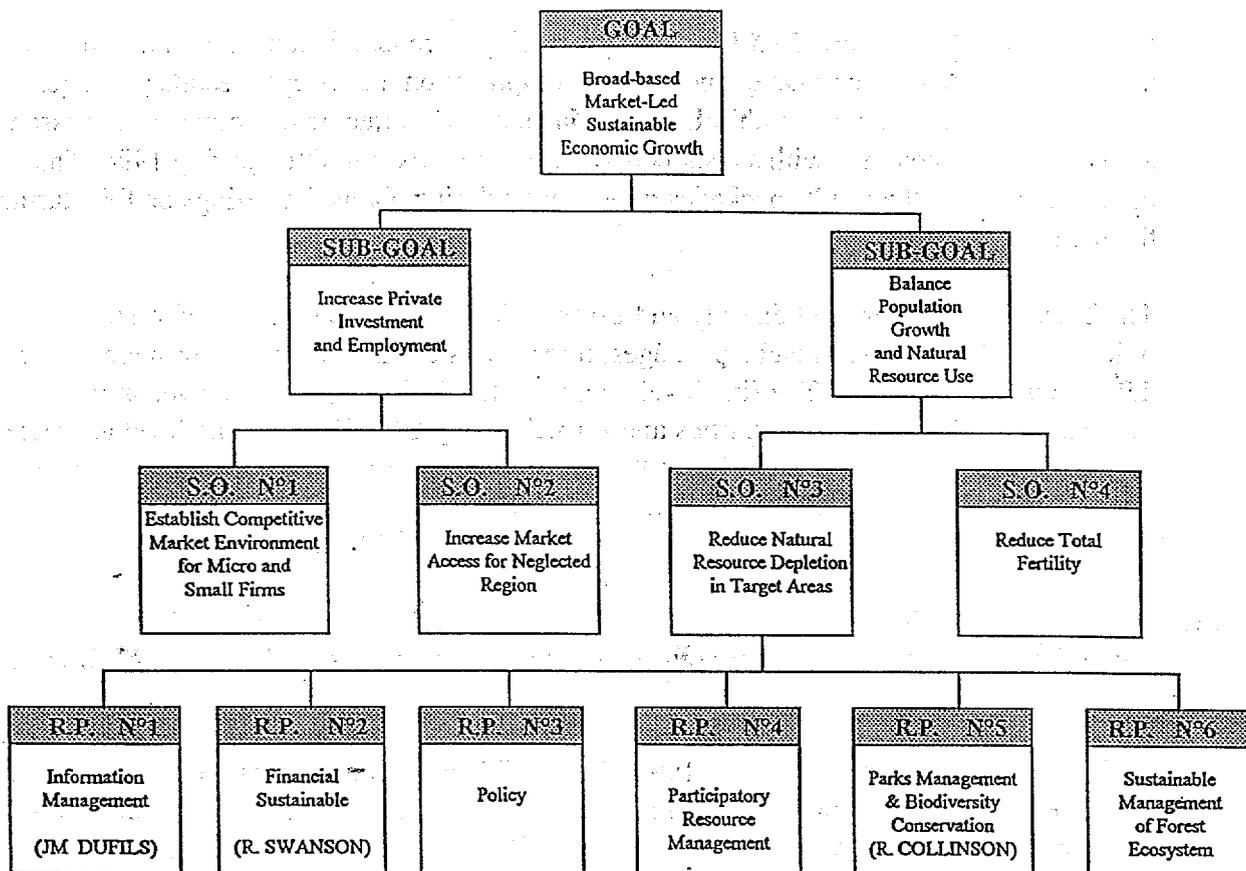
Since early 1995, USAID, in close collaboration with each of its partners (e.g., Malagasy government departments, nongovernmental organizations, contractors) has held a series of workshops on reengineering. Beginning with USAID policies and philosophy in this area, reviews were made of the all mission strategic objectives found in the Country Development Strategy Statement (see figure on Country Program Strategic Framework). All USAID contracts were regrouped, and the contractors subsequently met to plan how to implement the various strategic objectives. The TR&D contract under the SAVEM project fits throughout USAID's natural resource management portfolio and corresponds directly to strategic objective 3—to reduce natural resource depletion in Madagascar. In the old management structure, three projects fit into this framework: SAVEM, KEPEM, and Debt for Nature.

One of the strengths of this approach has already become evident: closer collaboration and information flow among existing projects has already improved. It has also become clear how other projects (e.g., CAP project with funding for farm-to-market roads) can support ANGAP's needs for infrastructure development needed to open the economic (and tourism) potential of many of the national parks and reserves. Future, new funding will be channeled to objectives identified within the context of results packages. Continuation of TR&D's SAVEM project activities, after the last quarter of 1997, will be achieved under this new contract mechanism.

During 1995, TR&D's advisor, Dr. Richard Swanson, provided support to two of the results packages (RPs) of S0 3—Parks Management and Biodiversity Conservation and Financial Sustainability, while Mr. Jean-Michel Dufils served as a core member to the Information Management results package. In 1996, the new long-term TR&D advisor in Parks Operations and Ecotourism, Mr. Roger Collinson, will replace Dr. Swanson on the Parks Management results package.

In 1996 TR&D's chief of party, Dr. Richard Swanson, will continue to serve as "chief technical advisor" to the Director General of ANGAP. In this capacity, he will also monitor the training and short-term technical assistance program. TR&D has added a long-term advisor position to its team, Mr. Roger Collinson, who will serve as ANGAP's Parks Service Advisor. He is named as the counterpart to ANGAP's newly established Department of Park Operations, through which he will also serve an essential role in developing policy and guidelines with the Department of Ecotourism and Marketing and with the Director General. Mr. Dufils will continue as chief advisor to the DIVB on technical hardware and software management issues, while Dr. Swanson will continue to provide this department with monitoring and evaluation guidance. Mr. Dufils's duties will be expanded during 1996 to include assisting other ANGAP departments in better using the available information. With the arrival of the park system advisor, the scopes of work for the three long-term TR&D advisors have been reviewed and revised (annex 5, table 8).

USAID / MADAGASCAR
COUNTRY PROGRAM STRATEGIC FRAMEWORK



5. TR&D Support Activities for each Results Package (RP) through 1996

Beginning with this report, TR&D will be presenting its reports in a manner tailored to the new approach to program management—with emphasis on the specific results packages which our contract supports within USAID Madagascar's strategic objective 3, discussed above. This will continue with subsequent quarterly reports submitted during 1996. The official names for the results packages may change during planned meetings on this during the next few months.

The TR&D SAVEM project directly addresses various "results packages" of strategic objective 3. Within those results packages, three levels of information are provided about TR&D contract activities. The first level addresses the desired *results*—arrived at in discussions with all concerned parties and formalized by USAID. A second level addresses the *means* that may be used to arrive at the desired results. Finally, the third level addresses what *major activities* TR&D has programmed within the appropriate means and to achieve the desired results.

5.1. Results Package 1—

Support to the production and circulation of information and the evaluation of NRM impact

TR&D's geographic information system (GIS) advisor is a member and leader of the results package 1 (RP1) core team. During 1996, the DIVB's main strategies are to support ANGAP's move toward park management activities and develop a capacity to analyze and disseminate relevant data/information. TR&D will support the DIVB to develop activities in compliance with RP1 objectives/results/means. With the transfer of the DSEP's monitoring and evaluation responsibilities to the DIVB, the latter department will benefit from the technical guidance of both TR&D and TFMT advisors. Both advisors contribute directly to the program described below for ANGAP's DIVB.

Listed below are the DIVB's 1996 activities, planned according to these strategies and to RP1 means of reaching these objectives.

5.1.1. *Information Acquisition on Natural Resources in Madagascar*

- Extend technical support to non-SAVEM field operators for data collection and management (Andrigitra, Zombitse, Ambohitantely, Isalo, Baie de Baly, Manombo, etc.).
- Train operators' staff in data collection and management
- Produce a monthly catalogue on available GIS/ANGAP data
- Pilot project to produce and disseminate georeferenced biodiversity data on CD-ROM
- Elaborate on a national monograph (network) on biodiversity
- Produce a high-quality, tourist image map for Isalo with USGS (a new sale product)

5.1.2. *Creation of Framework, Policy, and Standards Biodiversity for Data Collection*

- Define priority areas for national-level research
- Establish norms for the collection, management, and transfer of data and information
- Design a DIVB biodiversity database compliant with international standards.
- Provide quality control of FTM digital data for Zombitse, Vohibasia, Andringitra, Andohahela, and Isalo
- Update technical specifications for digital data quality control assessment
- Set standards for vegetation classification to be used by all field operators (collaboration with University/Department of Agronomy)
- Integrate digitized FTM 1\500.000 topographic map from USGS within GIS/ANGAP
- Make existing data consistent with DIVB standards (data conversion)

5.1.3. *Development of Socioeconomic and Ecological Information Network*

- Extend the DIVB computer network to other ANGAP departments
- Train DIVB staff in network maintenance
- Integrate of ANGAP's documentation unit to national (CIDST) and international (IBISCUS) networks.

5.1.4. *Development of appropriate political and judicial policy*

- Organize a national workshop on biodiversity research
- Participate in regional workshops on Biodiversity Convention with UNEP
- Attend annual International Biodiversity Convention meeting
- Attend annual CITES meeting

5.1.5. *Development of ANGAP institutional capacity to manage and analyze data*

- Develop DIVB capacity for analysis and information production (recruitment of one person and local short-term technical assistance)
- Train ANGAP and operators' staff in GIS and remote sensing
- Design and implement data collection and analysis and integrate SAVEM project-level socioeconomic and biological data into ANGAP's GIS system
- Train integrated conservation and development project staff in digitized data quality control
- Train integrated conservation and development project staff in data base management
- Draft documentation for data management training
- Provide socioeconomic and ecological and program information to users, including USAID's assessment of program impact indicators

- Participate in annual reviews and monitoring of integrated conservation and development project activities
- Modify monitoring and evaluation indicators, as necessary, to respond to ANGAP's needs during 1996 and beyond
- Develop appropriate monitoring indicators to track the impact of development activities in the upcoming Environmental Program—phase 2—tested during this transition period through 1997

5.1.6. Support in the Development of Park Management Plans (spatial analysis and cartographic products)

- Provide technical support to produce management plans for park management
- Provide technical support to produce a research plan for the main protected areas
- Assist in the establishment of procedures for identifying and evaluating various systems used to manage protected areas. Set up a monitoring and information system to make this knowledge and experience available to those managing protected areas.

5.1.7. Support to parks, reserves and integrated conservation and development project monitoring and evaluation system implementation

- Purchase georeferenced aerial videography to monitor land-use changes in protected areas and priority areas in peripheral zones
- Have progressive transfer of monitoring and evaluation activities from ANGAP's DSEP department to the DIVB
- Restructure of the DIVB in order to incorporate the new socioeconomic and ecological monitoring activities
- Organize annual monitoring and evaluation for integrated conservation and development projects' workshop in October, 1996
- Provide additional direct technical support to socioeconomic and ecological monitoring staff of SAVEM integrated conservation and development projects and the DIVB
- Analyze SAVEM project case studies of socioeconomic impact and hypothesis testing.

5.1.8. Data Acquisition for 1996

Data acquisition is often the most expensive part of an information system. A summary of where we have come on this and plans for 1996 are provided below.

Type of Data	Situation in 1995	Plans for 1996	Budget Plans for 1996
Satellite Images and Derived Products	We were not able to purchase these data products from the USGS because they cannot sell to the private sector (competition with the private sector).	1996 is a key year for the monitoring of vegetative data. About 10 satellite images will be purchased from the private sector (EOSAT & SPOT)	\$40,000
Digital Cartographic Products	Approval for acquisition of these data from FTM was given under condition that they could deliver on a specific terms of reference (in terms of the data quality controls, etc.). Six months of negotiations were required to reach this agreement. The first data to be delivered to ANGAP field operators were 5 months late from FTM. The field operators insisted on paying for the data themselves from their own budgets.	Acquisition of digital cartographic products: 5 maps at 1:100,000 scale.	\$10,000
Map Products	These maps have been acquired for the protected areas managed by ANGAP.	Acquisition of these maps for all of ANGAP protected areas.	\$10,000
Aerial Videography	The initial pilot project was paid for by Conservation International	Plans are to continue this work for all SAVEM ICDP's for the impact monitoring studies of 1996.	\$15,000
Other Data	NA	Contingency	\$10,000
Total			\$85,000

5.1.9. Short-term technical assistance to be supported

- 1) Scope of work: georeferenced aerial videographic monitoring for impact (48 days; 8 weeks)
- 2) Scope of work: biodiversity database design (30 days; 5 weeks)
- 3) Scope of work: support to documentation management (2 x 6 days)
- 4) Scope of work: documentation indexing (local short-term technical assistance 2 x 60 days)
- 5) Scope of work: pilot project to produce CD-ROM with georeferenced data/protected areas (18 days; 3 weeks)
- 6) Scope of work: support to integrated conservation and development project monitoring and evaluation units for socioeconomic and ecological monitoring (12 weeks local)

- 7) Scope of work: support to studies of lessons learned, case studies of hypothesis testing, impact (8 weeks)

5.2. Results Package 2— *Financial Sustainability*

ANGAP, like a number of other park services around the world (e.g., South African National Parks Board), is a nongovernmental, not-for-profit, private association delegated by the state. Initially created in 1992 to coordinate activities in reserves. ANGAP has evolved over the past three years and has now been given the “green light” to become Madagascar’s National Park Service. It will manage the national parks, integrated special reserves, and special reserves of Madagascar.

ANGAP is attempting something that few national park services in the world have ever achieved—to become, in large part, financially sustainable. Lack of sufficient funding directly impacts an organization’s ability to protect biodiversity within the borders of parks and reserves. ANGAP staff have set an ambitious goal to establish ongoing funding. Many 1996 planned activities are designed to test a wide range of possibilities.

The Government of Madagascar provides very little financial support to ANGAP, other than an exemption of value-added tax on items purchased. ANGAP anticipates the end of donor funding and the threat this poses to its unique biodiversity. This has led ANGAP to aggressively examine operation costs and methods of sustainable financing. Essentially, what financial sustainability for ANGAP means is: to be able to support the recurrent costs of park and reserve employee salaries for park operations (conservation) activities, depreciation, and basic operating costs. Efforts toward this objective are outlined below. Listed below are 1996 activities planned according to these strategies and results package 2 means of reaching these objectives.

5.2.1. *Foundation and Trust Fund*

It is important that ANGAP project a stable and respectable image within Madagascar and to the outside world. It strives to become a “center of excellence” in parks management.

The protected areas of Madagascar have begun to generate revenue, which ANGAP needs to use and invest wisely. At present, these funds are held in a bank account with no protection against inflation. A 50 percent reduction in the value of the Malagasy franc in late 1994 was a serious blow to the value of funds being held. ANGAP would like to establish a long-term investment program the proceeds of which would be used for the recurrent costs. Foreign donors could contribute to such a fund to assist in building the capital needed to assure part of ANGAP’s future management needs. Until recently, the only Malagasy institutions allowed to have investment accounts outside Madagascar were banks.

In September, 1995, a new law created the Tany Meva Foundation. Tany Meva's objectives are to enhance the management of natural resources in Madagascar. The law under which Tany Meva is created provides for the investment of capital in Madagascar or in other countries. Revenue from these investments will be used to finance the foundation's objectives.

ANGAP plans to open an investment subaccount under the Tany Meva "umbrella" foundation. Since the legal establishment of this foundation in late 1995, KEPEM advisor Egide Cantin has been assisting in setting up the internal organization of the foundation. We have been advised that by mid-1996 the foundation will be ready to assist ANGAP. During the first half of 1996, ANGAP will need to prepare for its subaccount with Tany Meva.

ANGAP and its advisors have identified a number of fund sources for investment. ANGAP already generates funds for its short-term needs. As part of its overall sustainability program, it must continue to explore addition methods by which other funds can be generated. Financial sustainability issues fall into three distinct areas:

- (1) Funds already in existence, such as park entrance fees, sales of products and services, research and filming fees;
- (2) Potential for generation of new funds, such as green taxes, revenue from tourist facilities (concessions with national and international private-sector hotels), selling deeds to trees and forests, adopt-a-lemur programs, contribution boxes at hotels, airports, and national parks;
- (3) International fund raising. Two distinct areas of international funds for an endowment fund for ANGAP are
 - (a) USAID and other bilateral donors
 - (b) Fund raising from private foundations in the United States and elsewhere.

ANGAP has been advised to set aside, as a regular operating expense, the funds needed to cover depreciation on a regular basis. As cars, computers, and other capital expenses wear out, ANGAP would then have a source of funding to draw from to replace these. The Tany Meva subaccount would satisfy the need for longer term investment.

ANGAP has already received a positive verbal response from a number of potential donors. These include World Bank GEF funding, USAID direct funding for target programs, and Japanese grants. The MacArthur Foundation has agreed to fund some start-up costs.

Specific activities include:

- Review ANGAP's statutes for uniformity with law on Foundations in Madagascar 95-028.
- Maintain regular contact between ANGAP's DAF and Tany Meva

- Review issues that the contract with Tany Meva should contain
- Prepare contract between Tany Meva and ANGAP
- Identify needs for funding in a well-justified paper
- Identify foundations that fund the identified park management, and conservation activities
- Send letters of inquiry requesting information to the foundations
- Develop strategy for writing of grant applications
- Schedule visits to Foundations/Trust Funds with MacArthur Foundation
- Prepare operating accounts and determine amount of funds parks and reserves need to set aside for capital depreciation.

5.2.2. *Ecotourism and Marketing as a Support to Sustainability*

Support will continue to be given to ANGAP in developing ecotourism in and around the priority parks—providing people with alternatives to destructive practices. Spin-off activities from tourism in peripheral zones are seen as a major way of linking the benefit of the park's existence and the socioeconomic well-being of local populations.

In 1996 ANGAP, with the support of the monitoring and evaluation advisor, will establish accounts for each of the forty-two protected areas (see annex 3). These will illustrate the operating costs of each of the units in the parks network, help identify the funds needed, and track ANGAP's progress toward financial sustainability. In addition, park entrance fees need to be raised and prices set for services rendered within the parks (e.g., camping, guide services, special scenic drives, tour packages). In 1996, TR&D, through a special USAID grant, will assist in the identification of new opportunities for revenue generation and publicity.

5.2.3. *Monitoring for Sustainability*

The TR&D monitoring and evaluation advisor has prepared a worksheet which will be used to determine the income and expenses of the various parks and reserves of the network (annex 3). This table will be prepared individually for each park and reserve; aggregated, the information will allow ANGAP to determine its position in terms of program sustainability.

5.2.4. *Short-term technical assistance to be supported*

- 1) Scope of work: Platinum software training (2 weeks)
- 2) Scope of work: Trust fund and Tany Meva Foundation assistance (6 weeks)

5.3. Results Package 5—

Park Management and Biodiversity Conservation

Beginning in January, 1996, Mr. Roger Collinson joined TR&D as ANGAP's Parks Service Advisor. As ANGAP has moved aggressively toward progressively taking over

management control of a network of some 42 protected areas, the need for an in-house, professional advisor with both parks management and ecotourism expertise became critical. Mr. Collinson, assisted by Dr. Swanson, and with short-term technical assistance, will be leading the program described below.

To achieve its mission of establishing and managing national parks and conserving biodiversity, it is important that the following building blocks are first put in place:

- Develop an efficient, effective and highly respected professional institution
- Compile short, medium, and long-term plans for the development and management of National Parks and Reserves
- Develop a strategic and business plan for ecotourism, marketing, and public relations

5.3.1. Institutional Development

ANGAP has made considerable progress with regards to institutional development. To facilitate further progress toward the goal of becoming an efficient, effective, and highly respected institution, the following tasks are planned this year with results package 5.

5.3.1.1. ANGAP Internal Organization and Functioning

During 1996, ANGAP itself will be going through an internal transformation, moving from its organization of earlier years to a new structure for managing a national parks network. The advisors will provide:

- Support for the change of personnel management from the Department for Human Resources and Communication (DRHC) to the DAF
- Support for the change of socioeconomic and ecological monitoring from the DSEP to the DIVB
- Support for moving park entrance fee management from the DAF to the Department of Ecotourism
- Support to the director general and senior staff in determining new roles and responsibilities of all staff, at different levels, particularly in what is delegated to lower levels.
- Support to the new operational Department of Park Operations and Management in moving from the old DSEP task manager model to one of support to a network of park managers.
- Support to the new operational Department of Ecotourism and Marketing in moving from the old DRHC division to focusing on international marketing and publicity.

- Support to the Director General in plans for ANGAP's own Park Headquarters in Tana.

5.3.1.2. Development of Appropriate Policy and Legislation

The high-level policy and legislation governing the establishment and functioning of ANGAP is either inadequate, inappropriate, or misunderstood by other government stakeholders. During the Environmental Program-phase 2 discussions of late 1995, it was clear that one of the conditions needed was for the highest levels of the Government of Madagascar to recognize ANGAP's mission statement, its status as an independent association, and its mandate to manage the national parks and reserves of Madagascar.

With regard to the national parks, the existing decree was promulgated many years ago, when conservation policies were based on a highly restrictive approach. Consequently, there are sections of the act that are inappropriate for today's more liberal policies of sustained utilization and community benefits. Therefore, an important task during 1996 will be to:

- Review and obtain a thorough understanding of the legislation governing ANGAP and the National Parks and Reserves.
- Advise ANGAP on any amendment and/or new legislation that will be required for them to carry out their mission.
- Support the preparation of draft legislation, or a National Parks Act, for action by the National Assembly

These tasks may require legal expertise in the form of short-term technical assistance.

5.3.1.3. Strategic Planning

Significant progress toward a high-level strategic plan was made at the Sainte Marie planning session last September. However, strategic planning is a dynamic and ongoing process requiring annual revision, particularly at the early stages of an organization's development.

While a follow-up strategic planning session is planned for this year under the training budget (annex 6), important additional tasks will be to:

- Provide strategic and long-term planning advice on an ongoing basis to the Director General and Directors of ANGAP
- Hold smaller strategic planning sessions to develop lower-level strategies and goals, objectives, and action plans for the various divisions of ANGAP

- Accompany the Director General and Directors of ANGAP on a follow-up study tour of parks and reserves in South Africa

5.3.1.4. Developing Management Systems

Following on from strategic planning is the need to develop systems for the smooth functioning of an organization. While financial and administration systems are already in place, tasks for this year will be to provide advice to ANGAP to:

- Assign authority and accountability together with delegating responsibility and decision making to all the various levels of the organization.
- Establish an internal communication system that closes the potential communication gap (upwards and downwards) between ANGAP head office and the parks and between the various parks countrywide.
- Review the present administration and financial systems.

Assistance will be sought in the form of short-term technical assistance from the South African National Parks Board for the completion of this task.

5.3.1.5. Manpower Plans and Procedures

A manpower plan is essential for the efficient and effective functioning of an organization. The following components of such a plan have been identified as priority tasks for this year.

- Develop an organizational structure with specific emphasis on investigating the degree to which park-level decentralized structuring is appropriate at this stage of the organization's development.
- Determine staff needs both in the short term and over the next 5 to 10 years.
- Design a manpower development and training plan to meet the projected staff needs over the next 5 to 10 years.

In addition to the above planning, a further task will be to advise on the following essential manpower procedures:

- Recruit and select staff
- Develop job descriptions and job evaluation criteria
- Grade jobs for determining remuneration packages
- Perform appraisals to determining training needs and evaluating promotion potential

Ideally a full-time human resources manager should be recruited to develop and manage the above plans and procedures. Short-term technical assistance from the South African National Parks Board can be obtained during the interim.

5.3.1.6. Training and Workshops to be supported for 1996

The anticipated training programs and workshops to be supported for 1996 are given in annex 5, table 6, together with the estimated budget. The training programs have been determined in the absence of a manpower plan, but they will suffice in the interim until one is completed. Important components of this training programs are:

- Exchange program with Uganda National Parks
- Fact finding visits to a cross-section of parks and reserves in South Africa managed by the Natal Parks Board, North West Parks Board (formerly a homeland parks board) and the National Parks Board
- Fact finding visits to private and public-sector ecolodges in South Africa
- Study visits to East and Southern African national parks (Malawi, Kenya, Uganda)

5.3.2. Parks Operations Planning for 1996

5.3.2.1. Management Plans

The only park with a completed management plan is Ranomafana National Park. Management plans for the remaining three priority parks will be completed this year. The highest priority, in this regard, will be given to Isalo National Park. A revision of the Ranomafana management plan will also be undertaken.

In compiling park management plans, priority will be given to assisting ANGAP to:

- Write a statement of the vision, mission, goals, strategies, and objectives for each park
- Aggregate all baseline (inventory) data accumulated over the years from *ad hoc* research surveys, aerial photography, landsat
- Define park boundaries
- Develop a park zonation plan with particular emphasis on peripheral zones, buffer zones, and service zones
- Lay out plans for tourism facilities and management infrastructure in service zones

- Develop an ecotourism master plan (short and long-term) including trails, roads, campsites, interpretation centers, entrance gates, ecolodge sites, bush camps, which are related to estimated visitor carrying capacity
- Develop neighboring community policy
- Draft biodiversity objectives and monitoring and evaluation techniques
- Complete business plans relating income and expenditure to the achievement of set objectives
- Draft policy and procedures manuals for ongoing park management and maintenance tasks
- Write annual action plans

At least four weeks of short-term technical assistance will be required for the above tasks.

5.3.2.2. Support to Park Managers

Apart from management plans, ongoing support to park managers will be given on the following :

- Planning, leading, organizing and controlling a park operation.
- Budgets
- Annual work plans
- Maintenance of infrastructure
- Research and monitoring
- Visitor control
- Ecotourism facility development (e.g., trails and campsites)
- Fire control
- Law enforcement

5.3.2.3. Neighboring communities policy

Although a component of the park management plan, a general policy on the approach to communities neighboring ANGAP's National Parks and Reserves is required. The task of drawing up such a policy must address the following issues :

- Formalizing liaison committees
- Sharing of entry fees
- Controlled use of resources within parks (ZUC)
- Restrictions in buffer zones
- Facilitating community involvement in ecotourism opportunities, including crafts.

5.3.2.4. Transition from ICDP to ANGAP management

Advice, assistance, and perhaps mediation input will be given to ANGAP on an effective transition from integrated conservation and development project operator systems to direct management by ANGAP.

5.3.3. *Ecotourism, Marketing, and Public Relations*

One of ANGAP's long-term goals is that ecotourism will become a major source of revenue. This will contribute to the financial sustainability of ANGAP and also to local, regional, and national economies. This will include short-term technical assistance to local communities for the manufacture and marketing of local crafts and continuing product-quality improvements. A major study is planned to determine what each park has to offer to tourists and to develop new products for local and international markets. In Madagascar the tourism industry is growing exponentially— an average growth 86 percent in 1995 alone, compared with the previous year (annex 3).

With the major improvements taking place in the management of parks currently underway, and with the plans for aggressive expansion in 1996, we expect this trend to continue. As a first step toward the realization of this goal, the following is planned this year:

5.3.3.1. Interpretation Centers

ANGAP has received World Bank funding to construct at least 4 interpretation centers. Activities under the TR&D contract have been planned in 1996 to support this program through:

- Support in siting studies and in architectural internal and external design of interpretation centers for Isalo, Ranomafana, Ankarana, and Ambohitanteli.
- Support with georeferenced data for preparing legal documents for gaining title to the land on which these centers will be built along the border on these parks (service zones).
- Support to begin preparing for the displays, storylines, and so on to place in these centers once they are built. They are to be completed by the end of 1996.
- Support to the personnel who will be working in these interpretation centers. These centers will also be the location of the park offices, park entrance fee counters, small stores.

5.3.3.2. Ecotourism and Marketing in Madagascar's four Priority Parks

This effort will be supported by ten weeks of short-term technical assistance to assist ANGAP with the following:

- Developing a thorough understanding of the ecotourism market—both domestic and international
- Planning for appropriate infrastructure development for the parks
- Developing an appropriate framework to foster private-sector involvement in ecotourism
- Developing visitor centers and park products
- Assessing local crafts and product quality improvements

5.3.3.3. Ecotourism Marketing Strategic and Business Plan

Following on from the above project, there will be a need to advise the Director of Ecotourism and Marketing on an Ecotourism Marketing Strategic and Business Plan.

This strategic and business plan will:

- Identify target markets
- Identify potential tourism routes and packages
- Identify the balance of tourism facilities and services to be provided in and around the 4 priority parks
- Identify key travel media, travel agents, and travel operators in relation to these markets and arranging educational programs to the four priority National Parks
- Estimate a budget and schedule for all of the above

The above can be supported by short-term technical assistance and the South African National Parks Board.

5.3.3.4. Public Relations Strategy

In order to promote a good image of ANGAP locally, nationally, and internationally, it is necessary to have a public relations plan. A workshop is planned with the following objectives, to:

- Identify all ANGAP's stakeholders—ranging from the country's political leaders to the communities neighboring parks

- Identify strategies and mechanisms for communicating a constantly positive message about ANGAP to the key stakeholders

5.3.4. *Training and Workshops to be supported for 1996 (with budget)*

Following a series of week-long programming meetings with ANGAP senior staff on their 1996 work plan, priorities for use of the USAID and TR&D training program were set. Historically, ANGAP has not met its requested budget, as is evidenced in the carry over of last years' training balance to this year. Yet, with ANGAP's clearer focus and with increased training provided within the network of parks and reserves, the ambitious training plan laid out for 1996 program is realistic. This training plan and budget can be reviewed in annex 5, table 6.

5.3.5. *The Department of Administration and Finance and Human Resource Development program for 1996*

In 1996, TR&D staff will provide ANGAP's department of finance and administration:

- Continued support in the form of software training at the central-office level (e.g., DACEASY for the ANGAP ecoshop—using point-of-sale software)
- Additional training through short-term technical assistance in support of ANGAP's Platinum software, where, to date, they have only used the general ledger accounting system
- Support to strengthen the DAF through a training program by an accounting firm in Tana

With ANGAP's expansion to financial management of a network of parks, this system must be reviewed and prepared for the next step. We expect to be using DACEASY at the park level for accounting purposes, and this can be imported into the more sophisticated Platinum central accounting system. Secondly, we will be providing support to the Isalo National Park in installing DACEASY as their accounting system. TR&D's office manager will provide this support.

5.3.6. *Short-term technical assistance to be supported*

- 1) Scope of work: *Ecotourism and Marketing in Madagascar's Four Priority Parks*. Includes interpretation center planning and siting study. (10 person weeks)
- 2) Scope of work: *Developing an Appropriate Framework to Foster Private-Sector Involvement in ANGAP's National Parks* (2.8 weeks)
- 3) Scope of work: *Madagascar Domestic Ecotourism Market* (Private Sector; 2.8 weeks)

- 4) Scope of work: *International Marketing* (4 weeks)
- 5) Scope of work: *Support to ANGAP Marketing* (2 weeks)
- 6) Scope of work: *Pricing Policy Study* (e.g., entrance fees, cost of circuits, products; 1 week)
- 7) Scope of work: *Community Support for Ecotourism/Marketing/Product Development* (4 weeks)
- 8) Scope of work: *Support to Drawing up ANGAP National Parks Legislation Act* (2 weeks)

5.4. Results Package 6— *Forest Resource Management*

5.4.1. *Program to support integrated conservation and development project operators in 1996 (ZOC, ZUC)*

ANGAP, over the past year, has come to realize the importance buffer zones within the outside limits of the parks. Currently, no park or reserve in Madagascar has a buffer zone, but creation of such zones is considered essential for the long-term management and sustainability of the parks. Buffer zones would initially be created outside of the parks. With new legislation, the boundaries of current parks would then, hopefully, be moved out to the outside limits of these buffer zones. In this way, ANGAP can exert legal management over these areas. Buffer zones are intended for joint ANGAP and community management, based on clear understanding and formal agreements. Any one park buffer zone might have any number of the four basic subzones:

- 1) Service zones in which ANGAP would place high-impact tourism activities, including park offices, interpretation centers, education centers, possible campgrounds, even ecolodges concessioned out to private-sector management. The entire service zone (a park could have more than one) would be under total ANGAP management control.
- 2) Zones of human occupation (ZOC = Zone d'occupation humaine). People (small communities) living in this area are either residing illegally or were included within parks when boundaries were created. These people will be permitted to remain, but only under jointly agreed-upon conditions (e.g., no new expansion, buildings, etc.)
- 3) Zone of controlled natural resource use (ZUC = Zone d'Utilisation Controllee). Communities around parks may have traditional use rights to certain natural resources, such as harvesting of shrimp or eels, raffia, and so on. These uses will be evaluated and, if possible, long-term concession use rights will be given to selected communities for controlled use during selected times of the year. Or, in another example, for burial grounds found within park borders and the communities traditionally using these will

have the right to continue using them undisturbed. Once understood by local communities, these zones should actually provide enhanced security to historic and traditional/religious areas, which might otherwise be disturbed through the current open access system.

- 4) **Natural Forests, Pastures, etc.** Natural areas within a buffer zone must remain as natural as possible. Existing limited community activities such as rice farming and pasturing of livestock would be allowed to continue in a controlled manner. However, no new settlement may be installed in such an area.

The TR&D monitoring and evaluation advisor will provide support to renewed efforts in the development of community-use rights to selected natural resources found in a number of areas within buffer zones of the priority parks. Priority will be given to Isalo and Ranomafana during 1996.

5.4.2. *Short-term technical assistance to be supported*

- 1) **Scope of work: Community Management of Natural Resources in Ranomafana National Park buffer zone ZOCs and/or ZUCs.**

This activity zone will focus on the development of community management plans for the buffer zones of Ranomafana National Park. The plans will be developed in consultation with the local communities and the National Park authorities. The plans will cover the management of natural resources, including forests, pastures, and other natural resources. The plans will also cover the management of the buffer zones, including the establishment of community management committees and the development of community management plans. The plans will be developed in consultation with the local communities and the National Park authorities. The plans will cover the management of natural resources, including forests, pastures, and other natural resources. The plans will also cover the management of the buffer zones, including the establishment of community management committees and the development of community management plans.

The plans will be developed in consultation with the local communities and the National Park authorities. The plans will cover the management of natural resources, including forests, pastures, and other natural resources. The plans will also cover the management of the buffer zones, including the establishment of community management committees and the development of community management plans.

The plans will be developed in consultation with the local communities and the National Park authorities. The plans will cover the management of natural resources, including forests, pastures, and other natural resources. The plans will also cover the management of the buffer zones, including the establishment of community management committees and the development of community management plans.

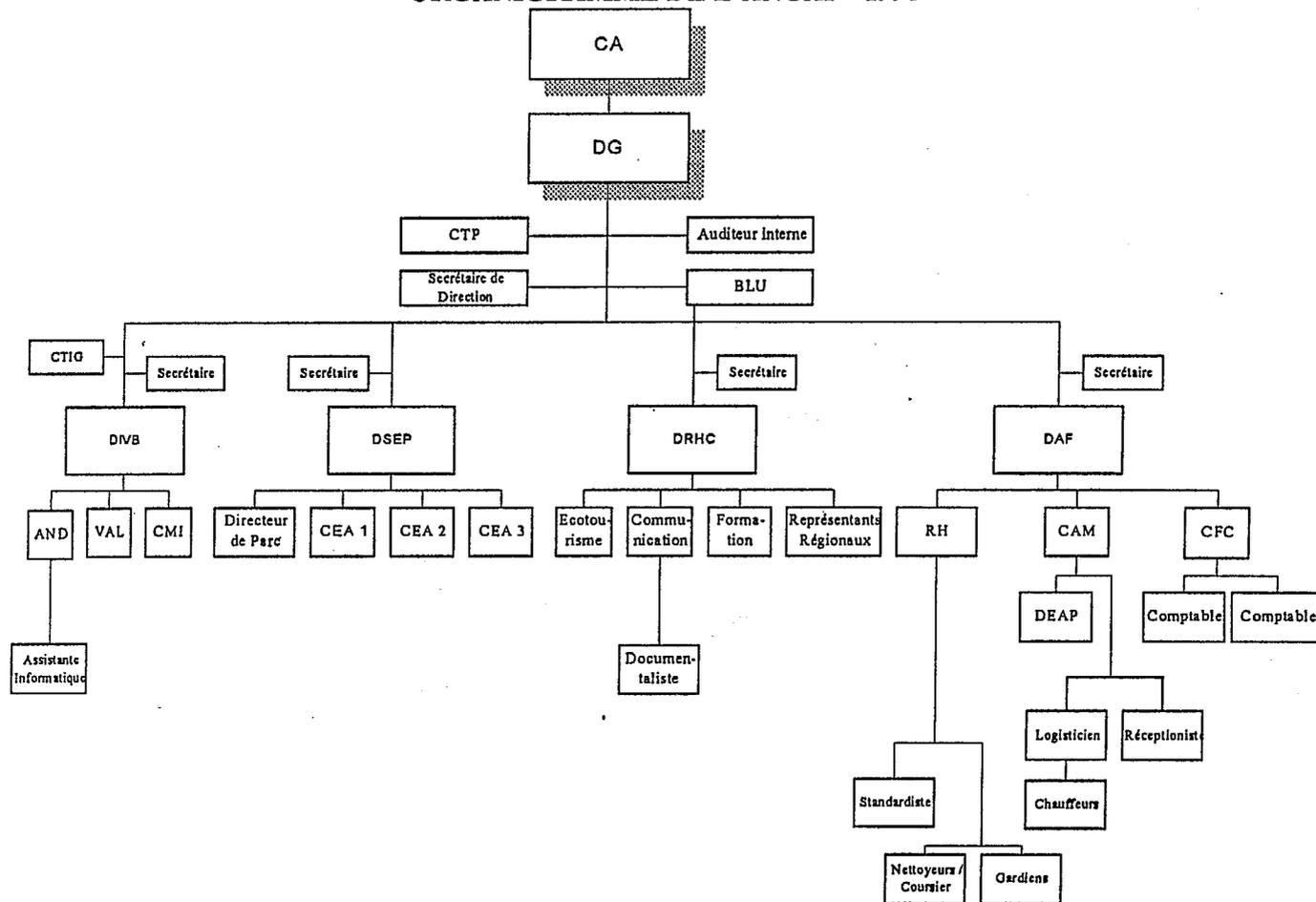
The plans will be developed in consultation with the local communities and the National Park authorities. The plans will cover the management of natural resources, including forests, pastures, and other natural resources. The plans will also cover the management of the buffer zones, including the establishment of community management committees and the development of community management plans.

Annexes

Annex 1. 1995 Administrative Support

Table 1. ANGAP Organigram through 1995	44
Table 2. Training, Workshops Completed through 1995	45
Table 3. Short-term technical assistance Completed through 1995	49
Table 4. Technical Reports, Publications and Deliverables through 1995	51
Table 5. Information Systems Database of the ANGAP DIVB	55

ORGANIGRAMME DE L'ANGAP - 1995



- | | | | |
|--------|---|--------|---|
| CA : | Conseil d'Administration | VAL : | Cellule Valorisation de la Biodiversité |
| CTP : | Conseiller Technique Principal | CMI : | Cellule Maintenance Informatique & Bases de Données |
| CTIG : | Conseiller Technique Information Géographique | CEA : | Cellule Evaluation & Appui |
| DIVB : | Département Information & Valorisation de la Biodiversité | RH : | Cellule Ressources Humaines |
| DSEP : | Département Suivi-Evaluation & Planification | CAM : | Cellule Approvisionnement et Gestion des Marchés |
| DRHC : | Département Ressources Humaines & Communication | CFC : | Cellule Finance et Comptabilité |
| DAF : | Département Administratif & Financier | DEAP : | Droit d'Entrée aux AP |
| AND : | Cellule Analyse des Données | | |

Department	Topic	Dates	Dates held	Number of Participants	Number of Days	Person-days Training	Lead Trainers/ Firm	Intended for	Total Budgeted	Total Obligated	Balance in U.S. dollars
	ANGAP/DEF workshop (team building)		August 22-25	19	4	76	ANGAP	DG/DEF	2,000	2,307	(307)
	Trainers' Training	June	July 24-28	5	8	40	ANGAP	DRHC/DEF/MINENV/Trainer Bemaraha	3,000	2,674	326
	Management workshop (human resources, marketing, communication)	September				0	Univ. of Pittsburgh	ICDP DIRNATs, ANGAP	10,000	0	10,000
	Staff retreat (senior staff, 10 and office staff, 14)		September 4-9 and 18-22	12	6	72	DG	ANGAP Senior staff	5,000	5,853	(853)
	Senior staff strategic retreat	February	January 30-February 1	20	3	60	DG	ANGAP Senior staff, chefs de cellule	2,000	909	1,091
	Divers Imprevu					0			23,000		8,798
	• Classe verte		April 9 and September	5	1	5	Samuel, COM	Winners at School		550	
	• Atelier DTCE in Foulpointe		March 14-17	1	4	4	Jacky	Meeting w/ ONE and Environment Ministry		79	
	• Formation Ecotourism Bemaraha		April 8 and 9	1	2	2	Hery Zo	Meeting w/operator and Local authorities		22	
	• Workshop: Participation de la Population dans les PCDI (Antsirabe)		May 17-18	2	2	4	Jacky/ Hery Zo	Local Populations /PCDI		209	
	• Report reproduction									305	
	• Hery Zo, Interpretation Center Training	October 9- November 3		2	20	40	Arkansas Parks	Hery Zo, formateur		11,502	
	• DRHC, Interpretation Center training and Banff course	November 19- December 1		1			Arkansas Parks and Banff	Jacky, DRHC Canceled			
	• English Training		July, August, September	12		18	Peace Corps	ANGAP Staff		1,535	
								Subtotal	51,500	30,810	20,690
DAF	Formation du personnel: gestion des stocks, recyclage comptabilite	October, November				0	South African Parks	Ratrimo Dir-DAF	2,500	33	2,467
								Subtotal	2,500	33	2,467
DIVB	Ateliers/Suivi Ecologique (held w/ M&E workshop)	October 9-13				0	DIVB/DSEP	Selected ICPD operator staff/DEF/ANGAP	3,000	2,000	1,000
	Ateliers/GIS/RS (3 ateliers)			25		0	DIVB	Selected ICPD operator staff/DEF	4,500		4,500
	Ateliers: Divers Imprevu (normalization, droits propriete)			50		0	DIVB	ICDP/DEF/ANGAP	4,500		4,500
	Formations (GIS/RS)			12		0	DIVB	Operators/DEF/ANGAP	4,500		4,500
	Formation: Photo-id		February 27- March 3	10	5	50	DIVB/ CFSIGE	Operators/DEF/ANGAP	3,000	750	2,250
	Formation: Global Positioning System		January 23-27	9	5	45	DIVB/CFSI GE	Operators/DEF/ANGAP	3,000	799	2,201
	Formation: collecte d'info			12		0	DIVB	Operators/DEF/ANGAP	3,000		3,000
	Formation: Divers/ Imprevu			6		0	DIVB	Operators/DEF/ANGAP	1,500		1,500
						0					0
	Locale: GIS/RS			6		0	DIVB	DIVB staff	2,000		2,000
	Locale: Maintenance info			1	30	30	DIVB	DIVB staff	1,500	1,558	(58)

Table 2. Training and workshops supported by TR&D in 1995

Department	Topic	Dates	Dates held	Number of Participants	Number of Days	Person-days Training	Lead Trainers/Firm	Intended for	Total Budgeted	Total Obligated	Balance in U.S. dollars
DSEP	Monitoring and evaluation third stage visits (sampling, questionnaire preparation, training, and monitoring and evaluation)	Quarters 1 and 2				0			1,000		1,000
	1. Ranomafana					0	DSEP	CTP, DIRNAT, personnel suivi-evaluation		0	
	2. Amber Mountain Complex					0	DSEP	CTP, DIRNAT, personnel suivi-evaluation		0	
	3. Masoala					0	DSEP	CTP, DIRNAT, personnel suivi-evaluation		0	
	4. Andasibe					0	DSEP	CTP, DIRNAT, personnel suivi-evaluation		0	
	5. Andohahela					0	DSEP	CTP, DIRNAT, personnel suivi-evaluation		0	
	Monitoring and evaluation fourth stage visits (data analysis)	3rd Quarter				0			1,500		1,500
	1. Ranomafana					0	DSEP	CTP, DIRNAT, personnel suivi-evaluation		0	
	2. Andasibe					0	DSEP	CTP, DIRNAT, personnel suivi-evaluation		0	
	3. Zahamena					0	DSEP	CTP, DIRNAT, personnel suivi-evaluation		0	
	4. Andohahela					0	DSEP	CTP, DIRNAT, personnel suivi-evaluation		0	
	5. Masoala			1	6	6	DSEP	CTP, DIRNAT, personnel suivi-evaluation		200	
	6. Amber Mountain Complex					0	DSEP	CTP, DIRNAT, personnel suivi-evaluation		0	
	Annual monitoring and evaluation workshop (review indicators, reporting, analysis)	October 9-13		50	5	250	DSEP	Operator Monitoring and evaluation staff, DIRNATs and/or CTP/DEF	3,000	1,704	1,296
	IMPREVU							Imprevu	14,500		33
	• Abel Ratovo, consultant monitoring and evaluation	September, November, December	October 31- November 24			90	DSEP, CTP	DSEP, COP		3,027	
	• Rasolofo and Alphonse, Program Management, South African Parks Board	October, November	November 16-24	2	7	14	South African Parks	Rasolofo Dir. DSEP and Alphonse		3,044	
	• Rasolofo and Alphonse, Interpretation Center Training, program management	October, November	October 31- November 13	2	9	18	Arkansas Parks	Rasolofo Dir. DSEP and Alphonse		8,396	
								Subtotal	20,000	16,370	3,630
DRHC	Agroforestry Training		October 4-7, 1994	7	4	28		ICDP Technicians	500	389	111
	Annual DIRNAT/ANGAP/GMU/ICDP Meeting	June	June 27-30	22	4	88	ANGAP	DIRNAT, DEF/Operators/GMU/CTP/CTSIG	6,000	4,475	1,525

Department	Topic	Dates	Dates held	Number of Participants	Number of Days	Person-Days Training	Lead Trainers/Firm	Intended for	Total Budgeted	Total Obligated	Balance in U.S. dollars
	DG ANGAP		March 15-26	1	10	10	South African Park	DG ANGAP		1,668	
	Park Management training, Park Manager of Isalo		June 14-August 19	1	47	47	South African Parks	Charles Park Manager Isalo		4,629	
	Formation des guides					0			10,000		6,434
	1. Beza mahafaly	January	February 6-11	20	5	100	Hery Zo	Guides de Beza		1,657	
	2. Andasibe					0	Hery Zo	Guides d'Andasibe			
	3. Ranomafana	February	February 20-25	20	5	100	Hery Zo	Guides de Ranomafana		1,314	
	4. Isalo	April				0	Hery Zo	Guides d'Isalo			
	5. Montagne d'Ambre	October				0	Hery Zo	Guides de la Montagne d'Ambre			
	6. Morondava					0	Hery Zo	Guides de Morondava			
	7. Masoala	March	March 6-12	26	5	130	Hery Zo	Guides de Masoala		594	
	Divers/Imprevu					0			10,500		342
	Park Management training: Park Manager Lokobe		August 12-September 24	1	30	30	South African Parks	Tombosoa Robert, Park Manager Lokobe		3,588	
	Park Management training: Park Manager Manombo						South African Parks	Park Manager Manombo (Canceled)			
	Park Management training: Park Manager Bemaraha						South African Parks	Park Manager Bemaraha (Canceled)			
	Park Management training: Park Manager Masoala		August 12-September 24	1	30	30	South African Parks	Rakotomalala Jocelyn, Park Manager Masoala		2,564	
	Park Management training: Park Manager Andasibe		August 12-September 3	1	15	15	South African Parks	Andriamanantenasoa Herijaona, Park Manager Andasibe		1,431	
	Park Management training: Park Manager Ranomafana		August 12-September 24	1	30	30	South African Parks	Ravelomanantsoa Zeze, Park Manager Ranomafana		12,575	
								Subtotal	53,000	26,607	26,393
						1,706 ¹		Subtotal	\$237,000	\$131,810	\$105,190

¹ 78 person months of training.

27

Department	Topic	Dates	Dates held	Number of Participants	Number of Days	Person-days Training	Lead Trainers/ Firm	Intended for	Total Budgeted	Total Obligated	Balance in U.S. dollars
	Locale: Divers/Imprevu					0	DIVB	DIVB staff	1,000		1,000
	Divers /Imprevu					0	DIVB	DIVB staff	4,500		2,858
	Linking Institutional Database	August, September, October			60	60	Herimanjato, Consultant	DIVB Staff		1,642	
	Exterieur: GIS/RS: INBio Conference and Visit of Institutions in Paris		April 24- May 1 and 5	2		14	INBio Conference	Lydic, DEF and Fara, DIVB	25,000	21,572	3,428
	Exterieur: Maintenance information	November, December		1	20	20	Learning Tree	Avo-Haja	14,000	8,192	5,808
	Exterieur: B.D. Biodiversite: ESRI		August 7-25	1	14	14	ESRI USA	Alain SIG DIVB	15,000	9,765	5,235
	Exterieur: Valorisation Biodiversite: CIRAD		August 22- September 28	1	29	29	CIRAD, FRANCE	Chantal VAL DIVB	15,000	8,748	6,252
	Exterieur: Divers/ Imprevu					0			5,000		2,035
	• Convention sur la biodiversite Biologique, Djakarta	November 6-17		1	10	10		Fara Dir. DIVB		2,965	
	• Database development and review coordination	November		1			South African Parks	Fara Dir. DIVB (Canceled)			
								Subtotal	110,000	57,991	52,009
Park Management Plan and Ecotourism Development	Workshop on Park Management and Ecotourism								10,000	0	9,343
	• Workshop Miller and McGregor		March 28	50	1	50	J. MacGregor/ ANGAP	ANGAP, ICDP DIRNATs, DEF		657	
	On-the-job training in ecotourism, marketing, park management	January-December					DRHC/DSEP	ANGAP/ICDP	15,000		9,072
	• Ecotourism										
	Training with JM/JMG		February 18- March 28	2		10	Jay Miller/ McGregor	Nirina Ecot. DRHC and Jacky Dir. DRHC			
	Jacky, ecotourism training		August 5-15	1	8	8	South African Parks	Jacky Dir. DRHC		2,000	
	• Marketing									0	
	Eliane, park office organizational procedures and duties		August 23- September 3				South African Parks	Eliane Administrative assistant of DG		2,000	
	• Park Management—training with JM/JMG		February 18- March 28	4		39	Jay Miller/ McGregor	Mamison, Alphonse, Future Park Managers: Charles, Tombosoa		836	
	• training with Dr. Hall		May 17-19	2	3	5	Dr. Hall Martin	Alphonse and Charles Park Manager Isalo		1,015	
	• training with Mr. Botha		September 1	15	1	15	Mr. Botha	ANGAP Directors + operators		77	
	Study Visit to South African Parks							1 DSEP, 1 DRHC (+7 ICDP reps.)	7,500		1,202

Table 3. Short-term Technical Assistance Completed through 1995

Total Short-term Technical Assistance in contract = 40 person months
TR&D Budget Line Item 45-21

Duties	Number of Weeks (Program)	Number of Weeks Used	Dates Planned	Scope of Work completed	Mission Clear?	Date Activated	Date Departed	Date Draft	Date Final	Translated?	Budgeted	Actual Cost	Balance	Name
1994														
Ecotourism Training	5		July 8-Aug. 13	Y	Y	July 8	Aug. 13	Aug. 12	Sept. 10	Y	8400	12249	-3849	James MacGregor
Communication Training	3		May 22-June 12	Y	Y	May 27	June 12	June 10	Aug. 15	Y	5040	5248	-208	Mary Leeds
Intellectual Property Rights/Biodiversity	3		Aug. 14-Sept. 3	Y	Y	Aug. 14	Sept. 3	Sept.	Oct. 15	Y	5040	5567	-527	Marianne Guerin McManus
Park Management (Systems Level)	6		Nov. and Dec.	Y	Y	Nov. 6	Dec. 15	Dec. 15	Dec. 23	Y	10080	8576	1504	Antoine Cloutier (Systems)
Park Management/ Planning (Systems Level) Added from South Africa	1		Nov. and Dec.	Y	Y	Dec. 4	Dec. 7	Dec. 15	Dec. 23	Y	1000	600	400	Robinson
Trust Follow-ups in WDC (World Bank, USAID) (Pauline Wynter)	1		Quarters 3 and 4	Y	Y						1680	2649	-969	Pauline Wynter
Total:	19										31240	34889	-2969	
1995														
Protected Area/Peripheral Zone Concessions Study: Park Entrance fee legal change (local)	8		2nd Quarter	Y	Y	June 22		August	August 1995	N	13440	4226	9214	Orgasys
Protected Area/Peripheral Zone Concessions Study: Peripheral Zone Legal Definition (local)	8		3rd Quarter	Y	Y	August	October				13440	9250		Orgasys
Park Management (Systems Level)	5		Quarters 2 and 3								8400		8400	
Park Management (Park Level)	8	7	Quarters 1 and 2	Y	Y	Feb. 14	March 31	March 29			13440	3965	4475	Jay Miller, Arkansas State Park System
Peripheral Zone Town—Ecotourism Planning	4		3rd Quarter								6720		6720	
Ecotourism (1) Parks Ecotourism Study	12	7	1st Quarter	Y	Y	Feb. 14	March 30	March 29			20160	14235	5925	James MacGregor (third visit)
(2) Ecotourism and Parks Management Support for Environmental Program 2 Review		2	4th Quarter	Y	Y	Nov. 30	Dec. 15	Dec. 15						
Sustainable Rainfed Agriculture	9		Quarters 1 and 2	Y							15120		15120	
Sustainable Harvesting of PA Natural Resources (community-based contracts)	16		1st Quarter	Y	Y	May 18	July 21	July 21			26880	7980	18900	Mario Gauthier + 2 Malagasy (Ony, Benjamin)
Trust Follow-ups in WDC (World Bank, USAID) (1) Support in United States	1	1	2nd Quarter	Y							1680	3896	-2216	Pauline Wynter
(2) Field Support		3	4th Quarter	Y	Y	Nov. 11	Dec. 15	Dec. 15				2221		Pauline Wynter
Biodiversity Classification (Ethnoscience, Folk Class.) (Monitoring and evaluation)	7		Nov. and Dec.								11760		11760	
Platinum training in accounting	1		4th Quarter								1680		1680	

Duties	Number of Weeks (Program)	Number of Weeks Used	Dates Planned	Scope of Work complete?	Mission Clear?	Date Arrived	Date Departed	Date Draft	Date Final	Translated?	Budgeted	Actual Cost	Balance	Name
ANGAP Perennialization (Local Commercial Marketing Public.) (LH) (12 PW)	4		4th Quarter								6720		1220	Calendars, Posters, Videos, Pamphlets, etc.
(1) Design of 4 Priority Area Pamphlets for Tourists				Y	Y	May 18 ⁹⁵	July 21	July 10	July 21	Y		2000		Suzanne Chaussivert Remuzat
(2) Design of 1996-97 ANGAP Protected Area Calendar				Y	Y	June 12	July 28	July 18		Y		3500		Elizabeth Woodwell
Support to Documentation Center		1	3rd Quarter	Y	Y	Sept. 10	Sept. 17	Sept. 17	Sept. 25	N		2456		Ms. Gasmi
Support to Monitoring and Evaluation field impact studies		6	4th Quarter/1st Quarter (1996)	Y	Y	Sept. 13	Feb. 1994	Nov. 10		N		2000		Abel Henri Ratovo
South Africa National Parks Board/Sister Parks Support Agreement (travel + per diem only) (TR&D line item)														
(1) Setting up of ANGAP and Parks Board Partnership/Training	1		2nd Quarter	Y	Y	May 21	May 27						1259	Dr. Anthony Hall-Martin, Director of Research and Development
(2) Support by Parks Board Administration and Personnel	1		3rd Quarter	Y	Y	Aug. 29	Sept. 2	Sept.	Sept. 1	Y			1128	Mr. Herman Botha, Director of Administration
(3) Support by Parks Board—Isalo Financial Plan	1		3rd Quarter	Y	Y	Sept. 24	Sept. 30	Sept.	December	Y			1181	Mr. Klasié Havenga, Director of Finance
Total Used:	83	21									Estimated Total:	139440	64297	75143
Third Quarter, July-September, 1995, 35 persons weeks of short-term technical assistance used														
Short-term technical assistance, International \$280 per day plus per diem														
Short-term technical assistance, Local \$100 per day (all expenses)														
Person Weeks are calculated at \$280 per day @ 6 days per week or \$6,160 per month														
Person Weeks for short-term technical assistance, for expatriate and local consultants are combined in table (local 1/3 of expatriate)														

Table 4. Technical Reports, Publications, and Deliverables through 1995

USAID Contract # 623-0110-C-00-1041-00; Project #1365

Name	Title	Date Published		Language		Number of Pages
		Month	Year	English	French	
Brusberg, Frederick	Monitoring and evaluation system for development of integrated conservation and development projects	November	1992	X	X	25
Peters, Joe	Ecotourism Development in Protected Areas in Madagascar	November	1992	X		104
TR&D	Quarterly Report 1, November 1991–March 1992 (Project Year One, First and Second Quarters)	April	1992	X		17
TR&D	Quarterly Report 2, April–June 1992 (Project Year One, Third Quarter)	July	1992	X		35
TR&D	Quarterly Report 3, July–September 1992 (Project Year One, Fourth Quarter)	October	1992	X		18
TR&D	Quarterly Report 4, October–December 1992 (Project Year Two, First Quarter)	December	1992	X		
MacGregor, James	PLANEGAP. Planification de l'Ecotourisme & Gestion des Aires Potentiels	February	1993	X	X	30
Swanson, Richard	Conservation and Socio-Economic Development: Monitoring & Evaluation	December	1993	X	X	65
TR&D	Quarterly Report 5, January–March 1993 (Project Year Two, Second Quarter)	April	1993	X		
TR&D	Quarterly Report 6, April–June 1993 (Project Year Two, Third Quarter)	July	1993	X		
TR&D	Quarterly Report 7, July–September 1993 (Project Year Two, Fourth Quarter)	October	1993	X		
ANGAP	Etude sur le systeme de gestion des DEAP	August	1994		X	
ANGAP	Elaboration d'un PAT au niveau des PCDI	April	1994		X	
Cloutier, Robinson, Grenfel, Robinson	National Park System Development in Madagascar: Potential Role of ANGAP in its Management	December	1994	X	X	115
Duffis, Jean-Michel	Objectifs et Strategie de Mise en Oeuvre du Systeme d'Information sur la Biodiversite	February	1994		X	17
Duffis, Jean-Michel	GIS/ANGAP, Analyse de Besoins (Document de Reference pour USGS)	March	1994		X	30
Hagen, Roy	Vision a long terme des programmes pour les Aires Protegees de Madagascar	October	1994	X	X	22
Jenkins, Martin	Export Trade in Madagascar's Plants and Animals: Consequences for Species Survival	January	1994	X	X	100
Jenkins, Martin	Export Trade in Madagascar's Wildlife: An Aid in Conservation	March	1994	X	X	32
Leeds, Mary	Communication & Consultation: Un cadre de travail pour un plan de communication pour l'ANGAP	August	1994	X	X	88
MacGregor, James	Planification et Formation en Ecotourisme et Aires Proteges	September	1994	X	X	43
MacGregor, James	Tourism Regional a Madagascar: Un Manuel de Travail pour la Planification du tourisme et de l'ecotourisme	June	1994		X	105
MacGregor, James	Ecotourism Mission, Tulear & Nosy Be Ecotourism Workshops	August	1994	X	X	130

Name	Title	Date Published		Language		Number of Pages
		Month	Year	English	French	
McManus, Marianne	Valorisation de la Diversite Biologique a travers les droits de la Propriete Industrielle & les Techniques Contractuelles	September	1994	X	X	114
Robinson, Peter	ANGAP's long term financial sustainability (Final Report)	July	1994	X	X	63
Swanson, Richard	Development for Conservation: Monitoring & Evaluation	August	1994	X		57
TR&D	Annual Work Plan, 1994 (Third)	January	1994	X		
TR&D	Programme Annuel de Travail & Projet de Budget 1994	January	1994		X	
TR&D	Annual Work Plan, 1995 (Fourth)	December	1994	X		40
TR&D	Semiannual Report 1, October 1, 1993-March 31, 1994	October	1994	X		
TR&D	Semi-Annual Report #2: April 1, 1994 through Sept 31, 1994	November	1994	X	X	55
Training Report	Planification et Gestion des Projets de Developpement (Moromanga)	September	1994		X	107
Training Report	Actes de la reunion annuelle des PCDI-Operateurs ANGAP-DEF - Toamasina du 30 Mai - 2 Juin	June	1994		X	
Training Report	Les Methodes de Management Moderne et la Planification et le Management du Projet (Moromanga)	September	1994		X	153
Training Report	Final Report: Planning and Management: Environmental Conservation Projects (U. of Pittsburgh, IMED)	September	1994	X		54
Training Report	Formation Organisee par le CFSIGE pour ANGAP: Compte Rendu de la Formation	August	1994		X	180
Training Report	Occupations Humaines des Aires Protegees	August	1994		X	
Training Report	Actes de la Reunion Annuelle des PCDI/Operateurs/ANGAP/DEF (Tamatave)	June	1994		X	75
Training Report	Acte de l'Atelier sur le System de Suivi du Programme Aires Protegees (Antsirabe)	October	1994		X	71
Training Report	Acte du Premier Atelier sur le Suivi Ecologique	May	1994		X	48
Miller, Jay and MacGregor, James	Development of a National Park System in the Republic of Madagascar	March	1995	X		75+
Faramalala Miadana et Raharimaniraka Lydie	Rapport de Mission sur l'Atelier "Prospection de la Biodiversite" (INBio/Costa Rica)	May	1995		X	36
ORGASYS	Etude sur les Droits d'entree, de recherche, de filmage et de redevance dans les Aires Protegees	July	1995		X	39
TR&D	Second Quarterly Report, Third Project Year, January-March 1995	May	1995	X		26
TR&D	Third Quarterly Report, Third Project Year, April - June 1995	July	1995	X		18
TR&D	Fourth Quarterly Report, Third Project Year, July-September 1995	October	1995		X	25
Nadia Rabesahala and Mario Gauthier	Conception et Mise en Oeuvre d'un Contract d'Accord pour l'utilisation durable des Ressources Naturelles entre les Communautes du Terroir d'Ambodivoangy (Zahamena)	September	1995	X	X	
Mabrouka Gasmi	Compte rendu de la mission de consultation pour la mise en place du systeme d'information documentaire de l'ANGAP	September	1995	X		5

Name	Title	Date Published		Language		Number of Pages
		Month	Year	English	French	
Training Report	Occupations Humaines des Aires Protegees: Actes du Colloque de Mahajanga (SEDRIC)	April	1995		X	117
Swanson, Richard	Antsirabe Monitoring & Evaluation: General Orientations	September	1995		X	4
Dufils, Jean-Michel	Reflections on Reorientations for ANGAP's DIVB Department	September	1995	X		8
Botha, Herman	Actions that should be Taken to Ensure Efficient Future Functioning of ANGAP	September	1995		X	26
Havenga, I.J.J.	Feasibility Study for Isalo National Park	September	1995		X	18
Swanson, Richard	National Parks and Reserves, Madagascar's New Model for Biodiversity Conservation: Lessons Learned Through Integrated Conservation and Development Projects (ICDPs)	October	1995		X	38
Training Report	Actes de La Reunion Annuelle De Coordination du Programme Aires Protegees (Morondava- DIRNAT Annual Meeting)	June	1995	X		85

Table 5: Information Systems Data Base of the ANGAP DIVB

THEME		SOURCE	FORMAT
Madagascar			
Aires protégées	(localization, limits, type)	Données COEFOR	ArcInfo
Géologie			Idrisi
Hydrographie		Données COEFOR	ArcInfo
Limits	Cote, Provinces, Firaiana	Données COEFOR	ArcInfo
Relief		Données COEFOR	ArcInfo
Routes		Données COEFOR	ArcInfo
Végétation	Image MSS et vecteurs	Données COEFOR	ArcInfo—PCI
Villes	(Provinces et Fivondronana)	Données COEFOR	ArcInfo
Ambohitantely			
Hydrologie		Carte FTM 1/100 000	ArcInfo
Routes		Carte FTM 1/100 000	ArcInfo
Village		Carte FTM 1/100 000	ArcInfo
Andohahela			
Hydrographie	Rivières principales	Carte FTM	ArcInfo-Mapinfo
Limite	Limite AP		ArcInfo-Mapinfo
Limite	Bassin versant		ArcInfo-Mapinfo
Routes		Carte FTM	ArcInfo-Mapinfo
Végétation	Image raster et vecteurs	Photo satellite & carte	PCI et Mapinfo
Villages	Principaux et petits villages	Carte FTM	ArcInfo-Mapinfo
Andringitra			
Limite AP			ArcInfo
Végétation			ArcInfo
Baie De Baly			
Activités : économique:	Flux des principales denrées		Mapinfo
Hydrologie			Mapinfo
Limite AP			Mapinfo
Population :	Répartition de la population		Mapinfo
Routes			Mapinfo
Village			Mapinfo

51

THEME		SOURCE	FORMAT
Isalo			
Hydrographie		Carte FTM	ArcInfo-Mapinfo
Limite AP			ArcInfo-Mapinfo
Routes		Carte FTM	ArcInfo-Mapinfo
Sites touristiques		Carte FTM	ArcInfo-Mapinfo
Végétation	Photo satellite MSS	Photo satellite MSS	ArcInfo-Mapinfo
Villages		Carte FTM	ArcInfo-Mapinfo
Manombo			
Limite AP		Carte MINAGRI 1/100 000 - 1966	Mapinfo & Roots
Routes		Carte MINAGRI 1/100 000 - 1966	Mapinfo & Roots
Végétation	Classification de la forêt	Carte MINAGRI 1/100 000 - 1966	Mapinfo & Roots
Villages		Carte MINAGRI 1/100 000 - 1966	Mapinfo & Roots
Masoala			
Biodiversité	Piste de suivi de lémuriens		ArcInfo
Biodiversité	Pistes de suiv des zones éco.		ArcInfo
Biodiversité	Sites de suivi		ArcInfo
Biodiversité	Zone de recherche		ArcInfo
Biodiversité	Zone de suivi aigles		ArcInfo
Biodiversité	Zone de suivi de lémuriens		ArcInfo
Masoala (suite)			
Biodiversité	Zone de suivi écologique		ArcInfo
Géologie			ArcInfo
Hydrographie	Rivières principales, navigables	Carte FTM	ArcInfo
Infrastructure	Port	Carte FTM	ArcInfo
Limite	Administrative		ArcInfo
Limite AP	y compris les parcs marins		ArcInfo
Topo	Courbes de niveau	Carte FTM	ArcInfo
Végétation	Photo aérienne	Photo aérienne	PCI
Végétation	Forêt, culture ...		ArcInfo
Village		Carte FTM	ArcInfo

98

THEME		SOURCE	FORMAT
Midongy du Sud			
Géologie			Mapinfo
Hydrologie			Mapinfo
Limite AP	(Limite proposée)		Mapinfo
Routes			Mapinfo
Végétation			Mapinfo
Villages			Mapinfo
Montagne d'Ambre			
Hydrographie		Carte FTM	ArcInfo, Roots
Limite	Administrative		Arcinfo, Roots
Limite AP	Ancienne limite et nouvelle limite		ArcInfo, Roots
Végétation	Classification Forêt		ArcInfo
Village		Carte FTM	ArcInfo, Roots
Ranomafana			
Limite	Zones périphériques	Carte DEF 1950	Mapinfo, Roots
Limite AP	Ancienne limite et nouvelle limite	Carte DEF 1950	Mapinfo, Roots
Végétation	Classification forêt	Photo Satellitaire TM	PCI & TIF
Végétation	Forêt & culture—Données année 1950	Cartes FTM & DEF: 1/100 000	Roots, Mapinfo
Village		Carte FTM 1950	Mapinfo
Zahamena			
Enclave	Données originales: Format ARC	CI	Roots & Mapinfo
Limits	Limits AP & zone périphérique	Données CI	Roots & Mapinfo
Pistes	Données originales: Format ARC	CI	Roots & Mapinfo
Végétation	Forêt, culture, tavy, savoka...		Roots & Mapinfo
Villages	Données originales: format ARC	Données CI	Roots & Mapinfo
Zones aménageables	y compris les zones tampons	Carte DEF 1/50 000	Roots & Mapinfo

THEME		SOURCE	FORMAT
Zombitse and Vohibasia			
Hydrographie	Source: FTM	Carte FTM 1/50 000	ArcInfo
Layon	dû à l'essai d'exploitation pétrolière	Photo aérienne + visite terrain 1995	ArcInfo
Limits	Parcs Zombitse & Vohibasia		ArcInfo
Orographie	Courbe de niveau, talus, ...	Carte FTM 1/100 000	ArcInfo
Planimétrie	Voie de communication, ponts	Carte FTM 1/100 000	ArcInfo
Pressions constatées	Exploitation forestière et divagation de boeufs	Sur terrain 1995	ArcInfo
Routes		Carte FTM 1/50 000	ArcInfo
Sites touristiques	Y compris les sites sacrés	Carte FTM 1/50 000 & Photo aérienne 1995	ArcInfo
Végétation	Agriculture Vohibasia— 1991	Carte FTM 1/50 000 & Photo aérienne 1995	ArcInfo
Végétation	Occupation du sol- Vohibasia -1991	Carte FTM 1/50 000 & Photo aérienne 1995	ArcInfo
Végétation	Occupation du sol - Zombitse - Années 1957 et 1991	Carte FTM 1/50 000 & Photo aérienne 1995	ArcInfo

Annex 2. Mahajanga Declaration

The Government of Madagascar has declared that it will not accept any form of nuclear, biological, or chemical weapons. This declaration is a commitment to the international community and a step towards a world free of weapons of mass destruction. The Government of Madagascar has also committed to the non-proliferation of nuclear weapons and to the peaceful use of nuclear energy. This declaration is a reflection of the Government's commitment to the principles of international law and to the goal of a world free of weapons of mass destruction.

The Government of Madagascar has also committed to the peaceful use of nuclear energy. This commitment is a reflection of the Government's commitment to the principles of international law and to the goal of a world free of weapons of mass destruction. The Government of Madagascar has also committed to the non-proliferation of nuclear weapons and to the peaceful use of nuclear energy.

The Government of Madagascar has also committed to the peaceful use of nuclear energy. This commitment is a reflection of the Government's commitment to the principles of international law and to the goal of a world free of weapons of mass destruction. The Government of Madagascar has also committed to the non-proliferation of nuclear weapons and to the peaceful use of nuclear energy.

The Government of Madagascar has also committed to the peaceful use of nuclear energy. This commitment is a reflection of the Government's commitment to the principles of international law and to the goal of a world free of weapons of mass destruction. The Government of Madagascar has also committed to the non-proliferation of nuclear weapons and to the peaceful use of nuclear energy.

The Government of Madagascar has also committed to the peaceful use of nuclear energy. This commitment is a reflection of the Government's commitment to the principles of international law and to the goal of a world free of weapons of mass destruction. The Government of Madagascar has also committed to the non-proliferation of nuclear weapons and to the peaceful use of nuclear energy.

The Government of Madagascar has also committed to the peaceful use of nuclear energy. This commitment is a reflection of the Government's commitment to the principles of international law and to the goal of a world free of weapons of mass destruction. The Government of Madagascar has also committed to the non-proliferation of nuclear weapons and to the peaceful use of nuclear energy.

55

The Mahajanga Declaration

Tropical Research and Development, Inc., in collaboration with ANGAP, ONE, and the Department of Forestry and Water, led in putting on the first national Madagascar conference, November 22-26, 1994, on human settlements and exploitation within protected areas. USAID was the major donor supporting this conference. World Bank and UNESCO were also partners. The 120 delegates attending included high government officials in all the concerned branches of government (justice, environment, domain, local civil authorities), those currently managing protected areas programs, various nongovernmental organizations (WWF, CI, CARE), donors, and at least fifteen Malagasy protected area farmer residents from various regions of Madagascar. After opening statements by the Minister of the Environment and the director general of ANGAP, Dr. Jacques Weber of CIRAD, as program facilitator, followed with an excellent paper summarizing the issues and proposing various routes that might be followed in searching for solutions.

Ten major resolutions were agreed upon by conference delegates to lead actions during the coming months. The USAID SAVEM and KEPEM projects are poised to contribute significantly to supporting all of these resolutions. These resolutions are considered extremely important and worthy of being communicated as widely as possible to groups interested in this subject outside of Madagascar. The 10 resolutions:

- (1) There is an urgent need to deal with the problems of protected areas and people residing within them in a holistic and long term fashion.
- (2) There is a need not only to better conserve existing protected areas but to extend this network within Madagascar to include all the biogeographical regions corresponding to existing national laws and international conventions concerning biodiversity conservation.
- (3) There is a need to completely ground Madagascar's Environmental Action Plan, as it concerns biodiversity conservation, in the realization that contractual relationships need to be established between local communities, the administration, and (protected area) operators.
- (4) One must continue the process begun (at Mahajanga) and reaffirm the beginning made in these resolutions through the Second Environmental Program currently being prepared in Madagascar.
- (5) It is necessary to become involved, starting at the beginning of 1995, in developing contractual agreements between rural (peripheral zone) communities and on going integrated conservation and development projects, with the support of ANGAP, the Department of Forestry and Water, the National Office for Environment, and other executing agencies.

These contractual agreements will concern the sustainable long-term use of natural resources within specifically defined territories within buffer zones, as well as, the conference participants wished to underscore, classified forests, national forests, community forests, and various other ecosystems such as aquatic and marine environments. These territories (with the exception of buffer zones) are all located within well-defined peripheral zones around protected areas.

- (6) It is resolved that a (legally binding) contractual process between local populations and the administration must be encouraged. The participants of the conference consider such a process the most appropriate route to resolve the problems of human occupation within protected areas, to the benefit of both biodiversity conservation as well as (socioeconomic) development interests (for peripheral zone communities).
- (7) It is necessary to put an immediate end to free access to protected areas, which is in fact occurring, though illegal. Conference delegates believe the problem of free access (and uncontrolled exploitation) can be solved by granting legal exclusive use rights, with clearly defined communities, based on a negotiated but well-defined management plan, defining a strictly defined territory, for a defined period of time. Such a concession would be renewable.

Sp

(8) The necessary actions must be taken, with all the force of the existing law, to stop all new intrusions into protected areas, all extension of land currently under cultivation, and all new land clearing within such areas, and all other forms of new pressures during the period of transition between the current state of affairs and the new management policies for protected areas to now begin. The representatives of the rural communities (located within protected area boundaries) present at the conference declared that rural communities such as their own would be prepared to cooperate in this sense.

(9) The attention of the government, the donor community, and the operators of the integrated conservation and development projects must be drawn toward giving priority to all actions that would facilitate this transition.

(10) To the extent possible, further elaboration, as well as action, must be initiated concerning the (various other) recommendations formulated during the course of this conference contained in the major report and annexes to these resolutions, particularly those put forward by the elected officials within Mahajanga region.

What was unique about this conference was that key decision makers were present and talking across the table with each other, discussing what is legally possible now and where new legislation might be necessary. These same decision makers also heard the points of view of "real life" rural farmer representatives of people living "illegally" within protected area boundaries. For the first time, it became clear that local communities should be assisted in obtaining the same kind of negotiated concession use rights (for even commercial ends) that wealthier citizens, companies, and corporations have always had within the country - but this time for the purposes both of safeguarding their use rights and for biodiversity conservation.

Annex 3. USAID SAVEM Project Monitoring Indicators

The following table lists the monitoring indicators for the USAID SAVEM project. The indicators are organized into four main categories: (1) Institutional Capacity, (2) Technical Capacity, (3) Financial Capacity, and (4) Environmental Capacity. Each category includes a list of specific indicators and their corresponding measurement methods.

Category	Indicator	Measurement Method
Institutional Capacity	1.1.1. Existence of a formalized organizational structure	Review of organizational chart
	1.1.2. Existence of a formalized policy and procedure manual	Review of policy and procedure manual
	1.1.3. Existence of a formalized recruitment and selection process	Review of recruitment and selection process
	1.1.4. Existence of a formalized performance appraisal system	Review of performance appraisal system
Technical Capacity	2.1.1. Existence of a formalized training program	Review of training program
	2.1.2. Existence of a formalized technical assistance program	Review of technical assistance program
	2.1.3. Existence of a formalized research and development program	Review of research and development program
	2.1.4. Existence of a formalized extension program	Review of extension program
Financial Capacity	3.1.1. Existence of a formalized budgeting process	Review of budgeting process
	3.1.2. Existence of a formalized financial reporting system	Review of financial reporting system
	3.1.3. Existence of a formalized financial control system	Review of financial control system
	3.1.4. Existence of a formalized financial management system	Review of financial management system
Environmental Capacity	4.1.1. Existence of a formalized environmental policy	Review of environmental policy
	4.1.2. Existence of a formalized environmental assessment process	Review of environmental assessment process
	4.1.3. Existence of a formalized environmental monitoring and evaluation system	Review of environmental monitoring and evaluation system
	4.1.4. Existence of a formalized environmental management system	Review of environmental management system

58

7.3 Annex 3: USAID SAVEM Project Monitoring Indicators

1. Target 3.1-1: Percent of Qualified Protected Area Management Plans Implemented
2. Target 3.1-2: Percent of Village Households in Priority Zones of Peripheral Areas
That have adopted Program Sponsored Alternatives to Destructive Practices
3. Target 3.3-1: Increase Income Opportunities for Resource Users: Percent of Protected
Area Entrance Fees Reinvested into Local Communities
4. Tourist Visits to National Parks and Reserves of Madagascar (% increase over previous year)
5. Breakdown of Park/Reserve Visits by Category of Tourist in 1995
6. Target 3.4-2: Increase Natural Resource Institutional Capacity: Increased Capacity of
National Parks Institution (ANGAP)
7. Financial Sustainability of National Parks Institution (ANGAP headquarters and regional
Park and Reserve Network)
8. Peripheral Zone of Protected Area Development Plans
9. Spatial (GIS) Data Development within ICDPs
10. Evolution of Vegetative Cover within Park and Reserve Boundaries: Base Line
11. Evolution of Vegetative Cover in Priority Areas of the Peripheral Zone of Protected Areas:
Base Line (for 3 Priority Areas)
12. Evolution of Vegetative Cover Within Park and Reserve Boundaries: Monitoring from Base
Line
13. Evolution of Vegetative Cover in Priority Areas of the Peripheral Zone of Protected Areas:
Monitoring Base Line (for 3 Priority Areas)
14. List of Protected Area Indicators

7.4 Annex 3: USAID SAVEM Project Monitoring Indicators; SO Monitoring Indicators, January 1996

Target 3.1 - 1: Percent of Qualified PA Management Plans Implemented (in SAVEM project ICDPs)

Note: This table does not show the achievements of the ANGAP in establishing this process in other parks and reserves of the network, which has been considerable. Isalo was added January 1, 1996, others have been operating since 1992.

	Andasibe	Ranomafana	Amber Mountain Complex Amber Mt. Ankarana		Zahamena	Andohahela	Masoala	Isalo
(1) Clearly defined and marked boundaries:	1 *a	1 *b	1 *c	1	1 *d	1 *d	1 *d	0
(2) Enforcement mechanism in place	1	1	1	1	0	1	1	1
(3) Clearly defined relationships between PA and surrounding communities	1	1	0	0	1	1	1	0
(4) a management structure for park management in place	1	1	0	1	0	1	0	0
(5) an ecotourism development plan in place	1	1	1	1	0	0	0	0
(6) system for investment of park entrance fees into the local communities	1	1	1	1	0	0	0	0
(7) a biodiversity / ecological monitoring plan in place	1	1	1	1	1	0	1	0
(8) park management plan document exists, and being used.	0	1	0	0	0	0	0	1
1995 Score= 38 or 59%	7	8	5	6	3	4	3	2

8*8= 64 points possible; 100% = 64

*a: Ranomafana 100% of boundaries already defined and marked. permanent markers remain to be placed along 40% of perimeter. Will be completed during first quarter 1996.

*b: Andasibe has 25% of permanent markers remaining to be placed, will be completed during first quarter 1996. Guard posts need reinforcement.

*c: Because Amber Mountain itself is composed of 4 separate protected area units (forest station, forest classee, special reserve), two of which are run by DEF, park management has been very difficult. ANGAP only receives 10% of the entrance fees here, which will never contribute much to the sustainability of this park. Development of services are also hindered by DEF. It is essential that the entire complex be reclassified as a single unit, one national park. Andasibe faces a similar potential problem with its forest station. To achieve change, USAID and donors will probably need some form of conditionality in PE-2 funding for DEF, with a promise to perhaps help DEF develop Montaigne Francaise, near Diego, in "exchange" for these changes.

*d: Limits have been clearly defined, but physical markers have not been completed to show these limits to the park or reserve.

Target 3.1-2: Percent of Village Households in Priority Zones of Peripheral Areas that have Adopted Program Sponsored Alternatives to Destructive Practices.

Note: Socio-economic impact (behavioral changes), if any, can take years to produce visible change. Isalo added January 1, 1996, others since 1992.

	Andasibe	Ranomafana	Amber Mountain Complex Amber Mt. Ankarana		Zahamena	Andohahela	Masoala	Isalo
(1) : Analysis of Pressures/ Causes & Spatialization	1	1	1	1	1	1	1	1
(2) Identification of Priority target zones in PZ	1	1	1	1	1	1	1	0
(3) Identification of activities to reduce pressures (hypotheses)	1	1	1	1	1	1	1	0
(4) Selection of sample households in priority zones to monitor impact (test hypotheses)	1	1	1	1	1	1	1	0
(5) Analysis of Activity Impact to reduce pressures	0	1	0	0	0	0	0	0
(6) At least 50% of sample households have adopted program sponsored activities	0	0	0	0	0	0	0	0
1995 Score= 30 or 81%	4	5	4	4	4	4	4	1

6*8= 48 points possible; 100% = 48

Target 3.3-1: Increase Income Opportunities for Resource Users: Percent of Protected Area Entrance Fees Reinvested into Local Communities

Note: Only national parks with ecotourism revenue generating potential are provided here. Isalo was added as a new USAID supported park in January 1966. ANGAP does not program disbursement of 1995 funds received until the next year - programmed as part of annual planning process. 50% of park entrance fees are given back to the peripheral zone communities of the park/reserve concerned to support micro-projects of their own choosing.

Income figures (#1) are totals up to the end of December, 1994. Only Parks with Significant Tourist Visits Provided here.

Park	Andasibe	Ranomafana	Amber Mountain Complex Amber Mt. Ankarana	Isalo	Beza-Mahafaly	Total AV. Score	YEAR	Score
1. FMG Amount Available (50%)	119,524,275	60,296,991	59,783,725	29,351,850	3,654,250	272,611,091	1993 and before	0%
2. FMG Reinvested/Distributed % Reinvested/Distributed # of Micro-Project Financed	83,393,996 70% 6	11,040,100 18% 11	24,613,500 41% 32	0 0 0	11,020,000 38% 1	130,067,596 48% 50	1994	24%
3. PZ Communities Exist for Revenue Sharing of DEAP? A "yes" = 100%	100%	100%	100%	100%	0	0	1995 1996 1997	47%
Score=	170%	118%	141%	100%	36%	0%	1998	

6*200%/2/6 = 100% possible score

Examples of micro-projects financed in park peripheral zones by park entrance fees to date (1994, 1995):

Andasibe: Construction of a small bridge over a river of great community benefit, construction of a rural school, a "village meeting house", extension of a water source to a new locality, village reforestation.

Ranomafana: Seed grain for green beans, squash; beehives for several farmers, fertilizers for a group of rice farmers, pig raising for a small group, village grainery, a village tourist campground.

Amber Mountain & Ankarana: Many small projects of about 800,000 fmg. each supporting community matching efforts: village pharmacy, repair of drinking water community taps, school benches for classrooms, village graineries, repair of medical clinics, construction of a new rural "school", construction of home for a rural school teacher, construction of several local level (fokontany) offices, repair of various rural schools (roofs, benches, black boards, etc.), repair of a local foot bridge, village reforestation, construction of a "village meeting house".

Isalo: Construction of a building in main town of Ranohira, as part of hospital complex. When sick people from the surrounding villages are placed into the hospital, they must have a family care for them - including preparing meals. There was no place for these people to stay in Ranohira. The building provides shelter for such people and is a very valuable community based effort for the entire area.

52

Tourist Visits to National Parks and Reserves of Madagascar (% increase over previous year)

	Grand Total		Andasibe		Ranomafana		Amber Mountain Complex (2 parks)		Isalo		Beza-Mahafaly		All Others	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
1992 *	5864		3151		642		1750		321		na		na	
1993	14,944	155%	6971	121%	3124	387%	3498	100%	1057	229%	294		na	
1994	17369	16%	5977	-16%	3256	4%	6007	72%	2041	93%	88	-234%	na	
1995	32,358	86%	11,883	99%	5074	56%	7442	24%	7959	290%				
1996														
1997														
TARGET	60,000													

Tourists bring in considerable funds into the peripheral zones and regions in which parks and reserves are located. We estimate that each tourist spends \$10/day/tourist within the peripheral zone of parks and reserves, over and above costs of lodging and park fees. This is economic support to peripheral zone populations around such parks and reserves.

* Earliest year for which ANGAP has data. Before this, DEF controled these protected areas and information is lacking/non-existent. Some of the funds represented here have not been collected from the tour operators and DEF who originally collected them. For this reason, in April 1995, ANGAP terminated the right for outside agencies (eg. travel agencies, hotels) to give out entrance fees, and is now selling them itself or through its own park personnel at the entrance to the various parks. ANGAP began collecting fees itself for Isalo in April 18, 1995, for example, and figures for 1995 are after this time!

Breakdown of Visits by Category of Tourist

63

Breakdown of Park/Reserve Visits by Category of Tourist: 1995

	Andasibe	Ranomafana	Amber Mountain Complex		Isalo	Beza-Mahafaly	All Others
			Amber Mt.	Ankarana			
Free Entrance	-		-	-	29		
Non-resident Expat. *	5902	2992	713	2040	5131		
Resident Expatriate	1314	696	319	869	854		
Malagasy Adult	2176	251	328	2301	1011		
Children	874	344	23	371	179		
Researchers/Filming	25	15	6	6	714		
Guides			-	-	5		
Students	1593	432	0	466			
Grand Total:	11,883	5074	1389	6053	7959		

* Entrance fees have been frozen since 1989 at 20,000 fmg for non resident expatriates, 15,000 for resident expatriates, 1000 FMG for Malagasy adults (including guides), and 150 fmg for children (up to age 14), 50,000 for researchers. In US \$ terms, the 20,000 fee was worth \$11.90 (1,680 fmg = \$1). In current terms (Dec. 1995), this same entrance fee is only worth \$4.70 (4250 = \$1). Efforts have been made by ANGAP for over one year to change these rates without success.

Note: In spite of the higher number of tourists entering Amber Mountain, and associated higher park revenue from entrance fees, ANGAP actually earned twice as much for itself in Ankarana with the lesser number of visitors. This is because DEF requires ANGAP to give them 40% of the entrance fees because of the Forest Station), 50% go to the communities, leaving only 10% for ANGAP operating costs.

59

Target 3.4-2 Increase Natural Resource Institutional Capacity: Increased Capacity of National Parks Institution (ANGAP)

Note: Changes in area reflect addition of new parks/reserves, or re-delimitation activities (+ or - gains).

		BASE YEAR	1994	1995	1996	1997	Percent of Target Reached
Target:							
Number of Protected Areas Being Coordinated:	50	14 1992	34	39			84%
Number of Protected Areas Under Direct Management by ANGAP	3	0 1992	1 Isalo	3 Lokobe Manombo Andranomena			133%
Number of New Parks or Reserves added to Network: *	8	0 1993	0	0			0%
Area for Parks and Reserves Conserved	1,500,000	1,120,472 ha. 1989	1,042,000	1,433,777			96%

* = This indicator is not under ANGAP's direct control. The DEF creates and changes the status of parks and reserves; proposed changes have been before DEF for most of 1995 without any action.

National Parks Institution (ANGAP headquarters and regional park and reserve network) Financial Sustainability

Minimum Operating Costs of Network (does not include costs of training, new infrastructure, development activities in PZ - mostly funded by donors)

Years	1994	1995	1996	1997
Income:				
1. Entrance Fees				
2. Shop Sales (posters) gross				
3. Park Service Fees				
4. Royalties/Lodging Income				
5. Trust Fund Income				
6. Research Fees				
7. Filming Fees				
8. Guide Fees				
9. Campgrounds				
Total Income:				
Expenses:				
1. Personnel				
2. Depreciation				
3. DEAP Returned to PZ				
4. Maintenance				
5. Products for Shop				
6. Functioning (fuel, supplies, utilities, etc.)				
7. Travel (in-country)				
Total Expenses:				
Sustainability				

List of national parks and reserves which are included in the above figures:

Peripheral Zone of Protected Area Development Plans

Note: Isalo was only added in January 1995. Other programs have been in place since 1992.

	Andasibe	Ranomafana	Amber Mt. Amb. Ankarana		Zahamena	Andohahela	Masoala	Isalo
Peripheral Zone well defined spatially	1	1	1	1	0	1	1	0
Existence of a development plan for Peripheral Zone	1	1	0	0	1	1	1	0
Strategy for Forest and other NR Management Developed	0	1	0	0	0	1	1	0
Limits/Boundaries of Pzcommunity NRM Territories Defined	0	0	0	0	0	0	1	0
Support System for Community Defined Activities in Place	1	1	0	0	0	1	1	0
Support to PZ Communities for Eco&Ethno Tourism Dev.	0	1	0	0	0	0	0	0
System in place to evaluate Attitude Changes Towards PA	1	0	0	0	1	0	1	0
Score = 23 or 41% completed	4	5	1	1	2	4	6	0

7*8=56 points possible, 100%= 56

Spatial (GIS) Data Development within ICDPs

Note: Isalo was added in January 1996; the other parks have been with programs since 1992.

Spatial Data Digitized:	Andasibe	Ranomafana	Amber Mt. Amb. Ankarana		Zahamena	Andohahela	Masoala	Isalo
Protected Area Limits	1	1	1	1	1	1	1	0
Villages of Peripheral Zone Identified	1	1	0	0	1	1	1	0
Limits of the Peripheral Zone	1	1	1	1	1	1	1	0
Limits of the Priority Areas within PZ (Zones and sub-zones)	1	1	1	1	1	1	1	0
Limits of Buffer Zone (if exists)	1	0	0	0	0	0	1	0
Areas of Pressures upon PA Identified	1	1	0	0	1	0	0	0
Elevation Data of PA and PZ (every 100 m)	0	0	0	0	0	0	1	0
Roads, Trails, Paths within PA and PZ	0	1	0	0	0	1	0	0
Major Rivers, Streams, Lakes	1	1	0	0	1	1	1	0
Score = 39 or 54 % Completed	7	7	3	3	6	6	7	0

9*8 = 72 points possible, 100% = 72

Evolution of Vegetative Cover Within Parks and Reserve Boundaries: Base Line

Note: Base line spatial data should be established for these indicators. In order to monitor the nature of change of these macro variables, we recommend that, for the park or reserve itself, every 5 years new remote sensing data be purchased and overlaid on the base line data.

Hectares, within Park or Reserve, of...	Andasibe	Ranomafana	Amber Mt. Complex Amb.Mt. Ankarana	Zahamena	Andohahela	Masoala
Year of Base Line Spatial Data		1991		1956		1991
Primary Forest (or mature, over 20 years old)				63,520		203245
Secondary Forest, Degraded Forest (less than 20 yrs old)				10,000		0
Savanna or Pasture Land				0		0
Cultivated Land (tavy, irrigated rice, other crops)				0		4840
Other Types of Vegetation				0		2370
Completed (Yes or No) Yes = 1 point				1		1

*a: foret littorale Points possible = 7; Score = 29%

Evolution of Vegetative Cover in Priority Areas of the Peripheral Zone of Protected Areas: Base Line

For the priority zones in peripheral zone, we recommend that every 2-3 years videographic aerial data be taken and superimposed on the base line data.

Priority Area # 1

Hectares, within Priority Area # 1 of...	Andasibe	Ranomafana	Amber Mt. Complex Amber Mt. Ankarana	Zahamena	Andohahela	Masoala
Year of Base Line Spatial Data	1991	1991		1956		1991
Primary Forest (or mature, over 20 years old)	343.88			688		15775
Secondary Forest, Degraded Forest (less than 20 yrs old)	249.6			69		503
Savanna or Pasture Land	0			1455		4136
Irrigated Rice Land	0			0		0
Other Types of Cultivated Land (tavy, other crops)	1711			641		21
Other Types of Vegetation (mangroves...)	0			0		1045
Completed (Yes or No) Yes = 1 point	1			1		1

7 points possible: Score = 3 or 43% complete

Priority Area # 2

Hectares, within Priority Area # 2 of...	Andasibe	Ranomafana	Amber Mt. Complex Amber Mt. Ankarana	Zahamena	Andohahela	Masoala
Year of Base Line Spatial Data		1991		1956		1991
Primary Forest (or mature, over 20 years old)				648		13745
Secondary Forest, Degraded Forest (less than 20 yrs old)				388		838
Savanna or Pasture Land				350		11022
Irrigated Rice Land				0		0
Other Types of Cultivated Land (tavy, other crops)				122		161
Other Types of Vegetation (mangroves...)				0		2144
Completed (Yes or No) Yes = 1 point				1		1

7 points possible: Score = 2 or 29% complete

Priority Area # 3

Hectares, within Priority Area # 3 of...	Andasibe	Ranomafana	Amber Mt. Complex Amber Mt. Ankarana	Zahamena	Andohahela	Masoala
Year of Base Line Spatial Data		1991		1956		1991
Primary Forest (or mature, over 20 years old)				2629		16011
Secondary Forest, Degraded Forest (less than 20 yrs old)				1198		691
Savanna or Pasture Land				3821		304
Irrigated Rice Land				0		0
Other Types of Cultivated Land (tavy, other crops)				483		395
Other Types of Vegetation (mangroves...)				0		0
Completed (Yes or No) Yes = 1 point				1		1

7 points possible: Score = 2 or 29% complete

69

Evolution of Vegetative Cover Within Parks and Reserve Boundaries: Monitoring from Base Line

Note: Base line spatial data should be established for these indicators. In order to monitor the nature of change of these macro variables, we recommend that, for the park or reserve itself, every 5 years new remote sensing data be purchased and overlaid on the base line data.

Hectares, within Parks or Reserves, of...	Andasibe	Ranomafana	Amber Mt. Complex Amb.Mt. Ankarana	Zahamena	Andohahela	Masoala
Monitoring Change: 2nd View of Region: Year:						
Primary Forest (or mature, over 20 years old)						
Secondary Forest, Degraded Forest (less than 20 yrs old)						
Savanna or Pasture Land						
Cultivated Land (tavy, irrigated rice, other crops)						
Other Types of Vegetation						
Completed (Yes or No) Yes = 1 point						

Evolution of Vegetative Cover in Priority Areas of the Peripheral Zone of Protected Areas: Monitoring Base Line

For the priority zones in peripheral zone, we recommend that every 2-3 years videographic aerial data be taken and superimposed on the base line data
Priority Area #1

Hectares, within Priority Area #1...	Andasibe	Ranomafana	Amber Mt. Complex Amber Mt. Ankarana	Zahamena	Andohahela	Masoala
Year of Base Line Spatial Data	1996	1995	1996	1996	1995	1996
Primary Forest (or mature, over 20 years old)						
Secondary Forest, Degraded Forest (less than 20 yrs old)						
Savanna or Pasture Land						
Irrigated Rice Land						
Other Types of Cultivated Land (tavy, other crops)						
Other Types of Vegetation (mangroves...)						
Completed (Yes or No) Yes = 1 point						

Priority Area # 2

Hectares, within Priority Area #2 of...	Andasibe	Ranomafana	Amber Mt. Complex Amber Mt. Ankarana	Zahamena	Andohahela	Masoala
Year of Base Line Spatial Data		1991				
Primary Forest (or mature, over 20 years old)						
Secondary Forest, Degraded Forest (less than 20 yrs old)						
Savanna or Pasture Land						
Irrigated Rice Land						
Other Types of Cultivated Land (tavy, other crops)						
Other Types of Vegetation (mangroves...)						
Completed (Yes or No) Yes = 1 point						

Priority Area # 3

Hectares, within Priority Area # 3 of...	Andasibe	Ranomafana	Amber Mt. Complex Amber Mt. Ankarana	Zahamena	Andohahela	Masoala
Year of Base Line Spatial Data		1991				
Primary Forest (or mature, over 20 years old)						
Secondary Forest, Degraded Forest (less than 20 yrs old)						
Savanna or Pasture Land						
Irrigated Rice Land						
Other Types of Cultivated Land (tavy, other crops)						
Other Types of Vegetation (mangroves...)						
Completed (Yes or No) Yes = 1 point						

11

SAVEM
LIST OF PROTECTED AREAS INDICATORS - Jan. 96

PROTECTED AREAS	PROVINCE	YEAR CREATED	AREA (Ha) 1989 Baseline (Source: Révue de la Conservation: WWF)	AREA (Ha) (Jan. 96)	SOURCE (Jan. 96)	FIELDS / OPERATOR	MAIN DONOR
NATIONAL PARKS							
Montagne d'Ambre (PNI)	Antsiranana	1958	18 200	22 740	SIG / ANGAP	WWF / CARE	USAID / WB
Isalo (PN2)	Fianarantsoa	1962	81 540	86 880	SIG / ANGAP	Peace Corps/ANGAP	USAID / WB
Mananara-Nord / Nosy Antafana	Toamasina	1989	23 000	20 649	SIG / COEFOR		UNESCO
Mantadia	Toamasina	1989	10 000	12 950	SIG / ANGAP	VITA	USAID
Ranomafana	Fianarantsoa	1989	41 610	40 613	SIG / ANGAP	Stony Brook	USAID
Masoala	Toamasina	1995	-	210 260	SIG / ANGAP	CARE / WCS	USAID
Zombitse	Toliara	1995	-	19 777	SIG / ANGAP	WWF / Peace Corps	WWF / USAID
Vohibasia	Toliara	1995	-	22 187	SIG / ANGAP	WWF / Peace Corps	WWF / USAID
TOTAL			174 350	436 056			
STRICT NATURAL RESERVES							
Tsingy de Bemaraha (RNI 9)	Mahajanga	1927 (Dc 1966)	152 000	172 100	SIG / COEFOR	VSF	FAC
Andohahela (RNI 11)	Toaliara	1927 (Dc 1966)	76 020	74 828	SIG / ANGAP	WWF	USAID
Zahamena (RNI 3)	Toamasina	1927 (Dc 1966)	73 160	64 510	SIG / ANGAP	CI	USAID
Ankarafantsika (RNI 7)	Mahajanga	1927 (Dc 1966)	60 520	57 750	SIG / COEFOR	CI	KFW
Marojejy (RNI 12)	Antsiranana	1952 (Dc 1966)	60 150	61 970	SIG / COEFOR	WWF	KFW
Tsaratana (RNI 4)	Antsiranana	1927 (Dc 1966)	48 622	52 130	SIG / COEFOR		
Tsimanampetsotsa (RNI 10)	Toliara	1927 (Dc 1966)	43 200	45 960	SIG / COEFOR		
Andringitra (RNI 5)	Fianarantsoa	1927 (Dc 1966)	31 160	32 540	SIG / COEFOR	WWF	KFW
Tsingy de Namoroka (RNI 8)	Mahajanga	1927 (Dc 1966)	21 742	28 460	SIG / COEFOR		
Betampona (RNI 1)	Toamasina	1927 (Dc 1966)	2 228	2 925	SIG / COEFOR	SAF / FJKM	
Lokobe (RNI 6)	Antsiranana	-	740	1 590	SIG / COEFOR	ANGAP	WB
TOTAL			569 542	670 188			
SPECIAL RESERVES							
Ambatovaky	Toamasina	1958	60 050	58 020	SIG / COEFOR		
Marotandrano	Mahajanga	1956	42 200	45 930	SIG / COEFOR		
Manongarivo	Antsiranana	1956	35 250	37 580	SIG / COEFOR		
Analamera	Antsiranana	1956	34 700	42 190	SIG / ANGAP	WWF / CARE	USAID
Anjanaharibe-Sud	Antsiranana	1958	32 100	31 980	SIG / COEFOR		
Kalambatritra	Fianarantsoa	1959	28 250	31 320	SIG / COEFOR		
Ambohilansahary	Mahajanga	1958	24 750	20 770	SIG / COEFOR		

21

Kasijy	Mahajanga	1956	18 800	23 050	SIG / COEFOR		
Ankarana	Antsiranana	1956	18 220	25 430	SIG / ANGAP	WWF / CARE	USAID
Tampoketsa d'Analamaitso	Mahajanga	1958	17 150	22 660	SIG / COEFOR		
Mangerivola	Toamasina	1958	11 900	12 010	SIG / COEFOR		
Bemarivo	Mahajanga	1956	11 570	12 080	SIG / COEFOR		
Maningoza	Antsiranana	1956	7 900	5 991	SIG / COEFOR		
Andranomena	Toliara	1958	6 420	78 48	SIG / COEFOR	Peace Corps	USAID
Ambohitantely	Antananarivo	1982	5 600	4 967	SIG / ANGAP		
Manombo	Fianarantsoa	-	5 020	5 281	SIG / ANGAP	ANGAP	WB
Forêt d'Ambre	Antsiranana	-	4 810	4 814	SIG / ANGAP	WWF / CARE	USAID
Bora	Mahajanga	1966	4 780	4 070	SIG / COEFOR		
Pic d'Ivohibe	Fianarantsoa	1954	3 450	4 044	SIG / COEFOR		
Cap Sainte Marie	Toliara	1962	1 750	2 918	SIG / COEFOR	Peace Coprs	USAID
Périnet / Analamazaotra	Toamasina	1970	810	525	SIG / COEFOR	VITA	USAID
Beza / Mahafaly	Toliara	-	580	455	SIG / COEFOR		
Nosy Mangabe	Toamasina	-	520	615	SIG / ANGAP	CARE / CI	USAID
TOTAL			376 580	404 548			
GRAND TOTAL			1 120 472	1 433 777			

Jan. 96 areas are measured on georeferenced data (SIG / DEF / COEFOR and SIG / ANGAP).
They are not the "official" data indicated in legal texts and used as 1989 baseline.

Georeferenced SIG / ANGAP data are permanently updated according to new available data.

Annex 4: Scopes of Work Planned for 1996*

1. Ecotourism and Marketing in Madagascar's Four Priority Parks
2. Madagascar Ecotourism Private Sector
3. Developing an Appropriate Framework to Foster Private Sector Involvement in ANGAP's National Parks
4. Support in Use of Platinum Accounting Software
5. Community Management of Natural Resources in Zones of Human Occupation and Controlled Use in the Buffer Zones of a Protected Area
6. Pricing Policy Study
7. International Marketing Study
8. Support to ANGAP Marketing
9. Community Support for Ecotourism/Marketing/Product Development
10. CD-ROM Production Using Georeferenced Protected Area Data
11. Aerial Videographic Monitoring
12. Biodiversity Data Base Design
13. Professional Documentation Support to ANGAP (Gasmi) (Training Program)

ANGAP/TR&D/SAVEM/USAID
Contract No.: 623-0110-C-00-1041-00

Scope of Work
STTA#1
Ecotourism and Marketing in Madagascar's Four Priority Parks

The Issue

Since 1991, ANGAP has evolved from an institution coordinating a protected area program into one which will, increasingly, over the next few years, directly manage a network of national parks and reserves. It will become a National Parks and Reserves Institution. ANGAP now coordinates over 39 protected areas, of which 11 have active ICDP program activities. It also directly manages three protected areas, Isalo National Park, and Lokobe and Manombo. Of the 9 protected areas considered to have considerable ecotourism potential within the network of parks and reserves, four have been given high priority for development over the past couple years and through PE-I. These are Isalo, Ranomafana, Amber Mountain, and Andasibe. ANGAP believes that these national parks have the real potential to fairly quickly (over next five years) become not only sustainable, but to generate revenues for the network as a whole.

The next phase of the environmental program, beginning January 1997, will place ANGAP in the role of developing and managing the parks while collaborating with various NGO's, local and international groups, and government programs. Two newly reorganized departments will lead ANGAP into this role. They are the Park Operations and Management Division and the Ecotourism and Marketing Division (formerly DSEP and DRHC). In early 1996, these departments will begin to function in new ways, and they program will be assisted by a long term technical advisor. We believe that Mr. Roger Collinson will be the person who will be taking this role.

As part of its program proposal for the Isalo National Park, for World Bank and USAID SAVEM funding, both donors cited the urgent need that a marketing study be made for the need for tourist infrastructure in and around Isalo. Donors indicated that at this point ANGAP would not be encouraged to manage "ecolodges" and that private sector involvement should be explored. It would only be following such a study for Isalo that the funds proposed by ANGAP for minimum tourist accommodations would be released.

As a result, the present study has been designed by ANGAP with TR&D assistance to meet these needs. ANGAP needs assistance in:

- (a) developing a thorough understanding of the ecotourism market
- (b) planning for appropriate infrastructure development for the parks
- (c) developing an appropriate framework to foster private sector involvement in ecotourism
- (d) developing visitor centers and park products.

General Objectives:

The long term goals of ANGAP in the area of ecotourism are that ecotourism will become a major source of revenue contributing to the financial sustainability of the protected area system in Madagascar. It will also permit the sustainable enjoyment by both Malagasy and expatriates of the natural resources found within the parks and reserves. ANGAP must take leadership in the ecotourism development of its parks and reserves and play a strong and positive role in influencing the private sector in supporting both its concern for economic assistance to the peripheral zone populations of these regions, but also the sustainability of the natural resources themselves found within the parks and reserves.

Specific Objectives

The ANGAP department of Ecotourism and Marketing will be the principal group directly concerned with this study, with close collaboration with the Park Operations and Management department and the park directors and ecotourism personnel of the parks to be visited.

The park operations and ecotourism advisor will take the leadership of a team to visit the four priority parks to assess their infrastructure development needs and ecotourism development potential in particular. Some parks will already have some concrete thoughts on these issues based on the park management plans they have been developing. Specifically:

(1) The advisor, assisted by others to be assigned to the team (see below), and the park staff concerned, will consider all forms of tourist lodging services which might be offered by each park, beginning from the most simple (picnic tables), to campsites with toilet facilities, to rustic shelters where a person can place their sleeping bag for the night, to tented camps or bungalows to three or four star hotels. The carrying capacity of the park will need to be evaluated, given current services and trails and new services which can be developed in the next year and more. The team will consider the nature of current tourist visitors, tourist growth, lodging already available near the park. The team will consider the park zoning already completed and make recommendations of where one might best site any of the various types of infrastructure listed above which would be considered appropriate to a specific park or reserve. Sites may be in the park or around the park.

(2) The team will make specific recommendations on what kind of tourist infrastructure would be most appropriate to see developed both this year, and in the coming five years - in or around the park.

(3) The team will make specific recommendations on which types of tourist lodging might be appropriate, if any, to be managed by ANGAP directly, and which should be managed in some form of partnership, or wholly, by the private sector. Suggestions should be made on where these sites might be located so that ANGAP can immediately begin to invite interested private sector groups to tender a proposal for such development. Some different management options (not exhaustive) include:

- (a) ANGAP directly owning and managing
- (b) ANGAP directly owning, but private sector management of some kind
- (c) ANGAP offers to the private sector a specific area (service zone or in zone tampon) where, under some contractual or concession type agreement, the private sector can invest and built its own infrastructure under certain conditions. These conditions would need to be spelled out.
- (d) ANGAP, in partnership with the private sector, is part owner in an infrastructure built and managed by the private sector.

(4) Any private sector collaboration on any infrastructure should include a clear cost and benefit analysis study of the benefits to be gained by each partner in the agreement - with particular attention given to what kind of revenue flow ANGAP could obtain from this venture and how ANGAP can protect its interests in terms of conservation objectives and park carrying capacity requirements being respected by associated partners from the private sector.

(5) The team will develop criteria for choice of private sector partners who might participate in any of the proposed private sector partner activities. Of particular importance will be a model agreement form which ANGAP could use with each such form of infrastructure proposed. This agreement will outline the clear obligations and responsibilities of each partner of the agreement.

(6) The team will also specifically address the issue of why private sector interests have not currently invested in tourist infrastructure and lodging in the peripheral zones of the parks. What have been the problems they have confronted? What can ANGAP do to help them remove obstacles to encourage development?

(7) The team will take environmental issues and future development of the area into full consideration.

(8) In conformity with the policy of ANGAP for architecture appropriate to the region, develop guidelines for the spatial arrangements of key infrastructure in designated service zones for each park. Provide recommendations for product and service development appropriate for each park which will help the Parks ecotourism division focus its efforts over next year and more.

(9) One member of the team will also, independently, conduct a review of the international and in-country market and trends for the future. What are the products being looked for by the international market, and which ones can ANGAP offer through its parks and reserves. One will need to look at the European market (France, Germany, Switzerland, Italy, Holland, Sweden, Britain, Spain), Southern Africa (specifically South Africa) and the Indian Ocean Region, North America (United States and Canada), Japan and Asia. Issues raised by this team member should be incorporated into the final recommendations for each park, and for ANGAP to follow up on.

Logistics and Work Relationships

The team, and specifically the study team leader, will work closely with Dr. Richard Swanson, TR&D Chief of Party and with the ANGAP Directors for Park Operations and Management and Ecotourism and Marketing.

TR&D will provide all logistical support for in-country travel, unless otherwise stated above, and will provide the team leader with one portable laptop computer and administrative assistant for his or her use while in Madagascar.

ANGAP will provide STTA with the available documentation for all four sites where the advisor will work.

Principal ANGAP Department Concerned

Department of Ecotourism and Marketing
Director: Jacqueline Rakotoarisoa

Deliverables [Complete draft report must be left with ANGAP and USAID before leaving the country]

The team (coordinated by the team leader) will provide:

1. Plans for the siting of the visitor interpretation centers in the four parks, and for a fifth if possible (Ambohitantely).
2. Specific list of the recommended types of tourist infrastructure for each park, with locations proposed and with management style described in detail (ie. ANGAP management or not, cost-benefits to ANGAP and possible private sector, etc.). These recommendations should take consideration of actual program budgets available so as to get immediate actions on some of these issues.
3. A marketing plan for each of the parks, with ideas about the use of the interpretation centers. This includes recommendations for product service development for each park, and detailed list of specific services which ANGAP can provide park visitors for a fee.
4. Copies of agreement documents which ANGAP should use if dealing with any of the private sector firms to be proposed by the team.
5. Clear justifications (management ability, costs and benefits) of any infrastructure venture into which the team may think ANGAP should implicate itself.
6. Mission report in which the various observations and recommendations of the team in responding to these terms of reference, are recorded. This must be provided to ANGAP before departure of the team leader at the end of 10 weeks.

CRITERIA FOR SELECTION OF SITE OF INTERPRETATION CENTER

1. Isalo National Park, with the Bemaraha Tsingy, is perhaps one of the most spectacular and unusual landscapes in Madagascar. It must also surely rate as one of the most unusual landscapes in the world. Consequently, any tourism facility must be designed and sited to not only fit into the natural landscape, but must themselves be unusual and spectacular.
2. Sites must be compatible with the park's master plan for infrastructure and facility development, which should include park zonation with service zones. An example should be that ideally the interpretation center should be located at the entrance to the park itself in some dramatic way.
3. In particular, sites must be compatible with the park's medium and long term objective for ecotourism. For example, is the strategy intended to double, triple, quadruple number of tourists in the next ten years? Also is this strategy to be given that this vista will not be marred by uncontrolled development in the future.
4. The site itself must not only be appealing in the immediate vicinity of the building, but not also look on to spectacular vistas in largest range possible (ie. 360 degrees if possible). The site should help "interpret" the landscape. Care must also continue encouraging the present backpacking market, or is the strategy to encourage a variety of markets, including upmarket package tourism?
5. Other important points to consider are the following:
 - (1) Site must be large enough to accommodate other infrastructure and facilities such administrative offices, an education center, camping site, and staff housing, etc.
 - (2) Distance from the town in which many staff live should be a factor.
 - (3) Security should be considered.
 - (4) Land tenure
 - (5) Should be customer friendly with respect to accessibility.
 - (6) An environmental impact assessment should be made on impact on park's biodiversity objective.
 - (7) Community/social assessment should be made.

Scope of Work
STTA#2
MADAGASCAR ECOTOURISM PRIVATE SECTOR

The Issue

This project is to serve as a contribution to a longer study entitled "Ecotourism and Marketing in Madagascar's four Priority Parks" which is to be led by Roger Collinson, ANGAP's Park Operations and Ecotourism Technical Advisor. The scope of work of this longer project is attached hereto.

General Objectives

This study must be designed to contribute to ANGAP's long term goal in the area of ecotourism viz. "Ecotourism must become a major source of revenue contributing to the financial sustainability of the protected area system in Madagascar". The general objectives of this study will then be the following:

1. Survey domestic entrepreneurs as to their attitudes and perceptions of the tourism potential of Madagascar. This should address their perceptions of the strengths, weaknesses, threats and opportunities. Specifically, they should be asked what are the stumbling blocks holding back the blossoming of the industry, especially that part of tourism related to National Parks and the natural environment. They should also be asked what government is doing wrong at present and what government and ANGAP can do to create the conditions necessary for the private sector to succeed.
2. Design a survey to obtain a profile of the tourists presently visiting the national parks and assess the attitude towards the facilities and services presently being offered.
3. From the results of this survey and informal workshops with the Chief of Party, Project Leader and ANGAP staff, a strategy plan and policy for ecotourism in the national parks and reserves should be drafted, with specific reference to the four prioritized national parks viz. Isalo, Ranomafana, Andasibe and Ankarana.

Specific Objectives

- i) Identify the geographic markets that ecotourism development and promotion should focus on, e.g. South Africa, Europe, the Pacific rim or USA, etc. Specific market information one or more of these areas would be helpful.
- ii) Identify the market niche that ecotourism development and promotion in the national parks should focus on e.g. backpackers, adventure travel, scientific study groups, luxury seeking retired groups, packaged tourism, etc.
- iii) Determine facilities and services that should be developed both inside and neighboring the national parks and reserves for meeting these market demands.
- iv) Advise on whether the emphasis should be on encouraging the informal sector to develop and run the facilities (i.e. lodges, hotels, catering, etc.) or should the emphasis be on attracting established formal entrepreneurs both locally and abroad.

Logistics and Work Relationships

The person will report to Mr. Roger Collinson. He will collaborate with ANGAP Director of Ecotourism and Marketing and ANGAP Director of Park Planning and Management, park managers and private sector tourism entrepreneurs.

19

Principal ANGAP Department Concerned

Department of Ecotourism and Marketing
Director: Jacqueline Rakotoarisoa

Deliverables [Complete draft report must be left with ANGAP and USAID before leaving the country]

The consultant will submit a written report on each of the specific objectives given above.

Site/s of Work

ANGAP office and around four prioritized national parks (Isalo, Ranomafana, Andasibe, Ankarana), visit private entrepreneurs and tour operators in various places in Madagascar, but particularly Antananarivo. Two days authorized in consultant's home country, if approved by the TR&D Chief of Party, for country-specific tourism information concerning Madagascar.

Qualifications and/or Years of Professional Experience

At least 10 (ten) years experience in the field of ecotourism and at minimum a Bachelor 's degree preferably in marketing or communication. Former experience in Madagascar would be highly desirable.

Language

FS level 3 in French desirable. It is our belief that most people he will be contacting in Madagascar (tour operators, hotel owners etc.) can speak English.

Starting date

First week of May.

Length of Contract

About 17 (seventeen) days including travel. A 6 day work week authorized.
2.8 work weeks .

CONTACT

Kelly Riedesel
Project Coordinator
Tropical Research and Development
Gainesville, Florida
Tel: 1 352 331 1886
Fax: 1 352 331 3284
e-mail: kr@trd.com

Dr. Richard Swanson
Chief of Party
Tropical Research and Development
Antananarivo, Madagascar
Tel: 011 261 2 30518
Fax: 011 261 2 31994
e-mail: trdm@mcimail.com

Scope of Work
STTA#3
DEVELOPING AN APPROPRIATE FRAMEWORK TO FOSTER PRIVATE
SECTOR INVOLVEMENT IN ANGAP'S NATIONAL PARKS

The Issue

This project is to serve as a contribution to a longer study entitled "Ecotourism and Marketing in Madagascar's four Priority Parks" which is to be led by Roger Collinson, ANGAP's Park Operations and Ecotourism Technical Advisor. The scope of work of this longer project is attached hereto.

General Objectives

The objective of this project will be to develop an appropriate framework to foster private sector involvement in ecotourism within and in the immediate neighbourhood of National Parks being managed by ANGAP.

Such a framework must be designed to contribute to ANGAP's long term goal in the area of ecotourism viz. "Ecotourism must become a major source of revenue contributing to the financial sustainability of the protected area system in Madagascar."

In achieving this long term goal, the following other goals must not be compromised:

- i) Ecotourism must become a major contributor to the local, regional and national economy.
- ii) Communities neighbouring parks must share in the benefits of ecotourism and they must be empowered to participate in the industry;
- iii) Ecotourism must permit the sustainable enjoyment by Malagasy and expatriates of the natural resources found within the parks and reserves.
- iv) Ecotourism must not compromise ANGAP's overall objective of conserving the biodiversity within the parks and reserves.

Specific Objectives

The larger study will identify the types of tourist facilities that would be permissible within national parks and their immediate neighbourhood. The larger study will also identify appropriate ecotourism activities for the parks and estimate visitor carrying capacities. On the basis of these results from the larger study, the specific objectives of this contributing study will be as follows:

1. Explore the following options and recommend which are the most appropriate for each of the various facilities and activities considered appropriate for each park.
 - * ANGAP directly owning and managing tourist lodging in or near parks.
 - * ANGAP directly owning but private sector managing
 - * ANGAP in partnership with the private sector is part owner of a facility and the private sector provides the management.

- * The private sector fully owns and manages facilities in a service or buffer zone under some form of contractual or concession agreement with ANGAP.

The above recommendations must be based on meeting ANGAP's general objectives described above. They must also be based on ANGAP's institutional capacity and capability with respect to :

- * Managing commercial enterprises themselves
- * Enforcing restrictive clauses in private sector contracts.

2. Recommendations must also be provided on:

- * The criteria for the choice of private sector partners for participation in any proposed involvement in facilities or activities.
- * Recommendations on model agreements which ANGAP can use as frameworks for negotiations with the private sector and which would form the basis for final contractual agreements between ANGAP and private sector bodies. Such agreements must clearly define up front the obligations and responsibilities of each party with particular emphasis on meeting ANGAP's general objectives for ecotourism as described above.

Logistics and Work Relationships

The person will report to Mr. Roger Collinson. He will collaborate with ANGAP Director of Ecotourism and Marketing and ANGAP Director of Park Planning and Management, ANGAP's legal advisor, park managers, and private sector bodies.

Principal ANGAP Department Concerned

Department of Ecotourism and Marketing
Director: Jacqueline Rakotoarisoa

Deliverables [Complete draft report must be left with ANGAP and USAID before leaving the country]

1. Ownership/management recommendations for each type of ecotourism facility and activity recognized as appropriate for the four priority parks. This must include a cost/benefit analysis and projected income flow to ANGAP over the next ten years.
2. A framework document for inviting and selecting private sector bodies for involvement in ecotourism within the parks and their immediate neighbourhood.
3. A framework document for future contractual agreements between ANGAP and the private sector.

Site/s of Work

ANGAP headoffice and four national parks surrounding areas.

Qualifications and/or Years of Professional Experience

Master's degree in Ecotourism or Business Administration and ideally a post-graduate qualification in Conservation or Natural Resources Management, with 10 years experience in Natural Resources Utilization related to tourism. Experience in structuring contracts and agreements for private sector operating enterprises in protected areas/national parks is essential.

Language

FS level 3 in French desirable. It is our belief that most people he will be contacting in Madagascar (private sector managers, etc.) can speak English.

Starting date

Second week of March 1996.

Length of Contract

About twelve 17 working days including travel. A six day work week is authorized.
2.8 person weeks.

CONTACT

Kelly Riedesel
Project Coordinator
Tropical Research and Development
Gainesville, Florida
Tel: 1 352 331 1886
Fax: 1 352 331 3284
e-mail: kr@trd.com

Dr. Richard Swanson
Chief of Party
Tropical Research and Development
Antananarivo, Madagascar
Tel: 011 261 2 30518
Fax: 011 261 2 31994
e-mail: trdm@mcimail.com

ANGAP/TR&D /USAID
Contract No.: 623-0110-C-00-1041-00

Scope of Work
STTA#4
SUPPORT IN USE OF PLATINUM ACCOUNTING SOFTWARE

The issue

The Association Nationale pour la Gestion des Aires Protégées (ANGAP), which is a non-governmental organization, has been solicited by the Malagasy government to support its political views concerning the country's biodiversity. ANGAP focuses principally on conserving biodiversity through a system of protected areas. TR&D /USAID strengthens ANGAP's capacity institutional and human - to gather data, develop policy, and promote coordination among the many non-government organizations involved in protected-areas management. TR&D assists ANGAP in strengthening and upgrading financial management. ANGAP shares its technical and financial knowledge with fields operators in order to insure proper use of funds allocated to the organization.

Pursuant to this mission, ANGAP (user ID # 48291) through Tropical Research & Development, Inc. purchased Platinum accounting software in 1993. Platinum System Manager Single User Version 3.01 Revision A has been used since 1994 for ANGAP's book-keeping records.

General Objectives

Because of the growing activities of the organization, and the fact that certain decentralized accounting structures have to be individually restructured, it is now necessary to use Platinum to its full capacity. However, staff do not currently have the necessary techniques to exploit the system. Difficulties have been encountered during the general accounting done annually, and specific tasks needed can not be carried out. Problems with the software occur in the following areas: gestion et suivi budgétaire, gestion dynamique, gestion multi-devises, comptabilité analytique, situations mensuelles et trimestrielles, gestion de la trésorerie au niveau des banques.

Specific Objectives

A trainer is needed to perform the following tasks:

- A) Inspect the software installation
- B) Review and make appropriate changes in and correct any problems in the accounting coding
- C) Configure of the software to ANGAP's needs, as well as to other software like Excel 5.0 and DACEASY version 5
- D) Train two accountants and the head of the finance and accounting division to such a level that they can use the software to its full capacity.
- E) Translate a French manual to use the software is necessary.

Logistics and Work Relationships

The consultant should contact the ANGAP's four directors as well as the personnel of Administrative and Finance Division.

Principal ANGAP Department Concerned
Administrative and Financial Department.

Director: Ratrimoarison Solonirina

Deliverables [Complete draft report must be left with ANGAP and USAID before leaving the country]

When all the required services are completed, a simulated operation will be performed to test the operational capacity of the software system and operators.

Site/s of Work

All work will be performed at ANGAP's headquarters.

Qualifications and/or Years of Professional Experience

Has degree in accounting & has various experiences in using accounting software at least 5 years in Platinum. Enough experience in configuring software.

Language

The consultant must be able to speak French and English at FSI 3 or above.

Starting date

The consultant will begin his work on May 2, 1996.

Length of contract

The trainer will provide 10 work days of training in Antananarivo, Madagascar plus 2 days for international travel. A six day work week authorized. 2.0 work weeks.

CONTACT

Kelly Riedesel
Project Coordinator
Tropical Research and Development
Gainesville, Florida
Tel: 1 352 331 1886
Fax: 1 352 331 3284
e-mail: kr@trd.com

Dr. Richard Swanson
Chief of Party
Tropical Research and Development
Antananarivo, Madagascar
Tel: 011 261 2 30518
Fax: 011 261 2 31994
e-mail: trdm@mcimail.com

Scope of Work
STTA#5
Technical Assistance in Social Forestry

Community management of natural resources in Zones of Human Occupation and Controlled
Use in the Buffer Zone of
Ankarana Special Reserve

The Issue

The government of Madagascar has management authority over forests, water and range resources in Madagascar. All untitled rural land falls under the jurisdiction of the national government. These resources, land water and forests, are the base of village economies. Traditionally, villages exert exclusive rights to land, water and forests around the villages. Access to village resources is controlled through village social institutions. Government management, though weak, breaks down village tenure relationship and opens up village land to migrants from other areas. This loss of respect for exclusive rights of villagers to village land leads to severe and rapid decline in forest resources and in land fertility. In the process village closed access tenure systems are transformed into open access commons. The Second Republic, recognizing this process, unofficially sanctioned the transfer of authority for land management back to local villagers. Various studies have shown that in default of national legislation and a clear policy to support village claims to village land, there is widespread anarchy in the occupation of land and unsustainable exploitation of the natural resource base. Nowhere is the assault on the commons more critical than in or around protected areas.

ANGAP and DEF are responsible for the sustainable management of natural resources in Madagascar. The main goal of ANGAP's protected area program is to conserve Madagascar's national parks and reserves. The PAs are directly threatened by the breakdown in village control of resources. ANGAP's program for the protected areas addresses conservation as a partnership with villagers. Through the integrated conservation and development projects, villagers are being encouraged to participate in the decision-making for the PAs and to share in the benefits of improved park management. Within this context ANGAP wants to continue to assist villages to improve the security of their land tenure.

ANGAP and DEF have carried out several studies and held workshops (cf. Mahajanga Declaration) on village land tenure and natural resource claims to determine ways of reducing rapid resource loss. The Third Republic's decentralization policy that minimizes the role of government in all productive sectors and renders local communities largely responsible for the management of their resource, provides a framework within which to work with villagers on the management of their resources. The challenge is to assist villagers to reassert village mechanisms for controlling resource use and to register their claims to village land.

It has been shown that closed access resources, that is products from land that is controlled or owned corporately by a known group of individuals, are used with greater care and with more investments of good land practices than is the case with open access. The key to closed access is widespread recognition of members of the group, widespread recognition of the boundaries of land they control and harvest, and official support of their rights to internal distribution of rights to specific products of the land. It is against this background that a joint ANGAP/ONE team worked with villagers in 1995 in Zahamena to map village land, identify user groups and the mechanisms used for distributing and controlling the use of village land, forests, water and range. The study was carried out at the unit of a village. Intact village institutions were found to be working and effective in limiting the users of resources to the members of the village and excluding non-villagers. In other words the village had all the elements necessary for claiming title to land in the name of the village.

Rabesahala et al also found that by negotiating and working with the decision-making structure of the village that PAs strengthen the management role of village institutions.

The study at Zahamena was meticulous and detailed. It establishes a baseline for further work. It is no longer necessary to repeat the study in such detail now that the basic characteristics of village management systems are known. Instead, given the number of villages living near PAs and forests, ANGAP intends to accelerate the process of recognizing and strengthening village institutions and registering village land claims with the Ministry of Land. The mandate for this study is to determine whether several villages can effectively manage their resources together. Is there a multi-village unit and institutions that can effectively mediate resource use within a group of villages? Can such a multi-village institution resolve resource conflicts? Can such a multi-village institution/s hold title to land or should title be better left at the individual village level. Can such a multi-village institution/s fit into the ANGAP concept of the peripheral zone around national parks and reserves, or in the management of specific sub-zone areas within buffer zones (zones tampons) of parks and reserves (zones of human occupation (ZOC), or zones of controlled natural resource use (ZUC)?

General Objectives

The USAID funded SAVEM project paper specifies that the project will test the hypothesis that local populations will alter their behavior from destructive to conservation of their environment if they see a relationship between their economies and social well-being to the conserved areas, and if they are empowered to make the right kind of decisions. The project paper also states that funding preference will be given to activities which "include measures to endow the surrounding populations with enhanced quasi-proprietary access to the protected areas . . .". It further states that "proposals should state which, if any, traditional activities can safely continue inside the protected area itself". These kind of activities present one of the best opportunities for establishing direct, positive linkage between PAs and the social and economic well-being of local populations, for the development of partnerships between ICDPs and local communities and for the empowerment of local people in natural resources management.

ANGAP, over the past year, has come to realize the importance of parks and reserves having a buffer zone within the outside limits of the parks. No parks or reserves in Madagascar now have these, but the creation of such a buffer zone is considered essential for the long term management and sustainability of the parks. The boundary proposals for the new Masoala National Park have included such buffer zones. Buffer zones would initially be created on the outside of parks. The only exception would be in areas of current parks, currently under consideration for declassification because of human occupation or other pressures. Such areas could be defined as a buffer areas - rather than "giving them up". With new legislation, the boundaries of current parks would then be moved out to the outer limits of these buffer zones. Only in this way can ANGAP exert some kind of legal management over these areas. Buffer zones are intended for joint ANGAP and community management, based on clear understandings and formal agreements. This study will give priority to working in a ZUC or ZOC of one selected national park. Any other buffer zone around any one park might have any one of four basic sub-zones:

(1) Service Zones in which ANGAP would place high impact tourism activities, including the major park office, interpretation centers, education center, possible campground, even an ecolodge concessioned out to the private sector. The service zone is under total ANGAP control.

(2) Zone of Human Occupation. People/small villages living in this area will be permitted to remain, but only under controlled conditions (eg. no new expansion, buildings, etc.)

(3) Zone of Controlled Natural Resource Use within "old" park boundaries. Communities around parks may have traditional use rights to certain natural resources, such as harvesting shrimp or eels, raffia, etc. These uses will be evaluated and if possible long term use rights given to selected communities for controlled uses during selected times of the year. Or, in another example, burial grounds may be found within the park borders and selected communities traditionally using these will have the right to continue using them undisturbed.

(4) Natural Forests, Pastures, etc. Natural areas within a buffer zone must remain natural. Existing limited community activities such as rice farming, pasturing of animals, etc. may continue in a controlled, limited manner. However no new settlements may install in these areas or buildings built, or major new agricultural ventures initiated.

Specific Objectives

Note: This consultancy will be assisting ANGAP to attempt to do something that has never before been successfully done in Madagascar. The obstacles encountered are almost as important to understand and to try to overcome as the ultimate object.

Following on the study by Rabesahala and Gauthier, the objective of this consultancy is to adapt its methodology for identifying, mapping and negotiating village-based natural resources management to a larger number of villages in one or more of the buffer zone categories (#2,3,4) mentioned above for the Ranomafana National Park. These areas would fall within the current "peripheral zone". The area of highest priority is the narrow strip of land following the river down towards the town of Ranomafana - with park on both sides.

1. A particular area which ANGAP believes should be incorporated into the buffer zone of a park and reserve should be identified for study. For this area, the consultant will need to identify all those with a specific stake to this area. This might be a group of two or more villages/communities which will need to be studied by the consultant to develop a decision-making profile identifying the community level leaders or family group leaders and roles they play in the village structure that should interact with the park operator vis-a-vis the national park.
2. Describe community rules for distribution and use of land and forest products and conflict resolution mechanisms should be described. Particular attention should be paid to rules referring to the entry of newcomers to the village system and use of land within village/community perceived jurisdiction. Are "traditional land tenure" rules breaking down?
3. Elicit village perceptions and prioritization of their own problems with resource use should be elicited with attention paid to distinctions in perception between women and men in terms of land in what could become a buffer zone of the park or within already existing borders of the park.
4. The consultant should determine the general characteristics that distinguish a functional supra village management institution.
5. With the support of the DIVB central office in Tana, the consultant should prepare a sketch map of village lands and its resources and the contiguous portion of the PA. It should show the protected area, peripheral zone, and the sub-categories of zones within a proposed buffer zone in the area of the study.
6. With the assistance of the staff of the Park operator, describe the type, quality and extent of natural resources being used by the village/community. Reference this to the resource map.
7. Provide specific recommendations for sustainable levels of NR use in the ZOC or ZUC of the study area for each of the major forest products with particular attention to be paid to the forest products, such as raffia, harvested within the PA boundaries. These recommendations have to be a part of the negotiated agreement between the PA and community. For example, if you determine that raffia or bamboo needs active cultivation and the villagers need technical assistance to develop cultivation methods, then that assistance from the PA should be part of the agreement. Attempt to predict the effects on the village economy and the potential for developing a working partnership with them if a ban on harvesting in the PA were enforced. Or when would it be appropriate to harvest shrimp from park systems (time, size, number, duration, etc), and how could this be realistically monitored.
8. With the assistance of Andarna Special Reserve staff and if necessary local STTA provided by TR&D/ANGAP, determine the steps to be followed for a community to establish use rights to the concerned zone. Provide examples of each document that a village must submit to apply for such use rights concessions, within what would become an ANGAP managed buffer zone.

88

9 Following the analysis, the consultant will assist Ankarana staff to negotiate an agreement with the multi-village group defining their relationship with each other, clearly defining the roles and responsibilities of all the parties involved in the concerned buffer zone of the park. The agreement will be based on the following principles:

- Empowerment of villager's use rights to natural resources of a designated zone within the buffer zone defined.
- Sustainable use of natural resources in this zone.
- Partnership between park management, peripheral zone communities, ANGAP and DEF.
- Linkages between conservation objectives and economic improvement of this buffer zone of the park
- Conservation of biological diversity of the park
- Conservation of the esthetic appeal to the park in zones immediately surrounding the core areas of the park.

Logistics and work relationships

The consultant will work under the direct supervision of the TR&D Chief of Party while in Madagascar. The consultant will work closely with the Director and staff of the ANGAP DIVB. The consultant will lead a team at the Park or Reserve to carry out the tasks list in the next section. The park will provide the full time service of some of their staff to be part of this team.

The consultant will work within the area defined by park experts as being the ideal location for this buffer zone. The operator will provide the consultant with socioeconomic data for each of the villages in the part of the (to be proposed) buffer zone concerned.

Principal ANGAP Department Concerned

Department of Information and Biodiversity Valorization (DIVB)

Director: Dr. Faramalala Miadana

Deliverables [Complete draft report must be left with TR&D's Chief of Party and USAID before leaving the country]

1. The main deliverables for the study are:
 1. A draft agreement as described in 9 above
 2. An action plan for the villages/communities long term concession to a part of the buffer zone "territory" as described in 8 above.
 3. Geo-referenced map products

Supporting documentation for the above agreement should be provided as annexes

- an analysis of the multi-village natural resource management system.
- maps of the territory of the villages/communities within the ZOC or ZUC.
- An assessment of the feasibility of the multi-village approach.
- Recommendations for sustainable harvesting rights for specific multi-villages use of specific resources and specific sites within the park's ZUC

2. The consultant will conduct a briefing at ANGAP to present the results a few days before the end of the contract.

Site/s of work

To be Determined: Proposed: Ankarana Special Reserve

Qualifications and Professional Experience Required

89

Graduate degree in social forestry and/or community based natural resource management
Five ten years of professional experience in social forestry in the tropics
Willingness to work in difficult field conditions
Prior experience in Madagascar essential

Language

Good reading and conversational French (at least FSI 3)
Spoken Malagasy would be an advantage.

Starting date

Second/Third Quarter 1996

Length of contract

Eight six-day weeks including report preparation time and travel time. A 6 day work week is authorized. 8 work weeks.

Contact

Kelly Riedesel
Project Coordinator
Tropical Research and Development
Gainesville, Florida
Tel: 1 352 331 1886
Fax: 1 352 331 3284
e-mail: kr@trd.com

Dr. Richard Swanson
Chief of Party
Tropical Research and Development
Antananarivo, Madagascar
Tel: 011 261 2 30518
Fax: 011 261 2 31994
e-mail:trdm@mcimail.com

Scope of Work
STTA#6

PRICING POLICY STUDY

The Issue

Park entry fees for ANGAP's national parks have not been raised for many years despite a substantial weakening of the local currency against major foreign currencies. Furthermore, in addition to park entrance fees, ANGAP is in the process of expanding its ecotourism facilities, products and services in support of its self-sufficiency objective.

To achieve this self-sufficiency, the optimum pricing of facilities, curios and services must be regarded as a critical success factor. It may be argued that the "Support to ANGAP Marketing" study, planned for the 3rd quarter, should determine optimum prices by researching what the market is prepared to pay. However, determining pricing policies for organizations with non-profit objectives such as ANGAP can be a complex undertaking. This applies particularly to National Parks where the objective is to encourage visits by local people.

Consequently, prices must ultimately be determined by pricing policies that attempt to balance what the market is prepared to pay against non-profit objectives. The cost of providing the facilities and services must also be considered as an important factor in the pricing equation. Finally, the pricing policy must conform to the National structural adjustment and macro-economic policy since ANGAP is essentially not part of the private sector and hence ultimately accountable to government.

General Objectives

The general objective is to have a pricing policy and procedure for determining and regularly reviewing prices for the facilities, products and services provided by ANGAP.

Specific Objectives

1. Determine what market (international, national and local) is prepared to pay using data from "Support to ANGAP Marketing" study.
2. Clearly distinguish between ANGAP's non-profit making and self-sufficiency objectives and recommend on how these can be reconciled when determining prices.
3. Become fully familiar with the national structural adjustment and macro-economic policy and evaluate to what extent these policies should be taken into account in formulating ANGAP's pricing policy.

Logistics and Work Relationships

The consultant will report directly to Mr. Roger Collinson, the Parks Operations and Ecotourism Advisor to ANGAP. He will also collaborate closely with the following:

- ANGAP Director of Ecotourism and Marketing
- ANGAP Director of Park Planning and Management
- World Bank representatives in Madagascar
- Senior officials in relevant government departments especially the Department of Tourism

Principal ANGAP department concerned

Department of Ecotourism and Marketing
Director : Jacqueline Rakotoarisoa

Deliverables [Complete draft report must be left with ANGAP and USAID before leaving the country]

The consultant must submit a written document that provides a comprehensive policy and procedure for determining prices for ANGAP's present and envisaged future ecotourism facilities, products and services.

A separate written report recommending prices for existing facilities, products and services and those which are planned for introduction during 1996/97 must also be submitted.

Site/s of Work

ANGAP office and the four prioritized national parks (Isalo, Ranomafana, Andasibe, and Ankarana). Also the World Bank office and various government offices in Antananarivo.

Qualifications and/or Years of Professional Experience

A minimum of a post-graduate degree in economics (or related fields) and 10 years experience in public and private sector economic policy. Former experience in the field of ecotourism would be highly desirable as would previous assignments in Madagascar.

Language

FS level 3 in French essential

Starting date

Third quarter of 1996

Length of Contract

About 12 days including travel. A 6 day work week authorized. 2 work weeks.

Contacts

Kelly Riedesel
Tropical Research and Development
7001 SW 24th Ave.
Gainesville, FL 32607, USA
tel. (904) 331-1886
fax (904) 313-3284
e-mail TRD@MCI.COM

Richard Swanson
Tropical Research and Development
1, rue Naka Rabemanantsoa
Immeuble Santa - Antanimena
Antananarivo 101
Madagascar
tel. 261 2 30518
fax 261 2 31994

e-mail TRDM@MCI.COM

93

ANGAP/TR&D/USAID
Contract No. : 623-0110-C-00-1041-00

DRAFT
Scope of Work
STTA#7

INTERNATIONAL MARKETING STUDY

The Issue

A major strategy in ANGAP's objective of financial sustainability is to develop and market ecotourism facilities, products and services in and around its National Parks. A sound knowledge of international market trends is essential for ANGAP to make decisions on both appropriate ecotourism product development and cost-effective marketing focus.

General Objectives

Because considerable research on international market trends has already been done elsewhere, a major task in this proposed International Marketing project for ANGAP should involve a desk top survey of the latest research findings.

Specific Objectives

From the findings of the desk top study, the consultant must formulate hypothesis on:

- Ecotourism products (facilities and services) for ANGAP's four priority parks that would be marketable internationally.
- The sectors of the international market (both geographical and niche) that ANGAP should focus its marketing efforts and resources on.

These hypothesis should then be tested by conducting a questionnaire survey of key international travel agents, tour operators, tourism product surveys and tourism academics.

Main ANGAP department concerned

Department of Ecotourism and Marketing

Logistics and Work Relationships

The consultant will report to Mr. Roger Collinson, Technical Advisor in Ecotourism and Park Operation. He/she will work in close collaboration with ANGAP Director of Ecotourism and Marketing.

Deliverables [Complete draft report must be left with ANGAP and USAID before leaving the country]

The consultant will submit a written report on each of the specific objectives given above as well as the result and analysis of the questionnaire.

Site/s of Work

USA, Europe, South Africa, Madagascar, ANGAP office.

94

Qualifications and/or Years of Professional Experience

The ideal consultant should have at least a graduate degree in marketing and five years experience (practical and academic) in international ecotourism. A proven track record of conducting tourism market surveys followed by formulating successful marketing strategies is an essential requirement.

Language

Since much of the research will be done outside Madagascar, fluency in French should not be essential but would be desirable.

Starting date

Second quarter of 1996

Length of Contract

Approximately 4 weeks.

Contacts

Kelly Riedesel
Tropical Research and Development
7001 SW 24th Ave.
Gainesville, FL 32607, USA
tel. (904) 331-1886
fax (904) 313-3284
e-mail TRD@MCI.COM

Richard Swanson
Tropical Research and Development
1, rue Naka Rabemanantsoa
Immeuble Santa - Antanimena
Antananarivo 101
Madagascar
tel. 261 2 30518
fax 261 2 31994
e-mail TRDM@MCI.COM

95

ANGAP/TR&D/USAID
Contract No. :623-0110-C-00-1041-00

Scope of Work
STTA#8

SUPPORT TO ANGAP MARKETING

The Issue/ General Objectives

Having completed the International Marketing study, it will be necessary for ANGAP's division of Ecotourism and Marketing to formulate a marketing strategy and business plan for the next five years.

Specific Objectives

This plan should include inter alia:

- Identification of target markets
- Identification of potential tourism facilities, products circuits, packages and services
- Identification of key travel media, travel agents and travel operators
- Arranging programs for the above agents and operators to visit the four priority national parks for product knowledge
- Identification of key media for the placement of advertisements and editorials
- Arranging educational visits to the 4 priority parks by key media to ensure sustained editorial exposure
- Determining brochure promotional video and other promotional requirements
- Identification of key international and domestic shows and exhibitions where ANGAP should exhibit its products.
- Estimating a budget and schedule for all of the above
- Identification of marketing agencies that can promote ANGAP and its products domestically and abroad on an ongoing basis.

Main ANGAP department concerned

Department of Ecotourism and Marketing

Logistics and Work Relationships

The consultant will report to Mr. Roger Collinson and work in close collaboration with ANGAP Director of Ecotourism and Marketing. He/she will also work with local travel agencies, tour operators, travel media, etc.

Deliverables [Complete draft report must be left with ANGAP and USAID before leaving the country]

A marketing strategy and business plan containing all the above mentioned specific objectives.

Site/s of Work

ANGAP head office.

Qualifications and/or Years of Professional Experience

While the South African National Parks Board can assist with the above, it would be ideal to formulate the above plan with the assistance of an international tourism marketing agency.

Language

FS level 3 in French desirable. It is our belief that most people he will be contacting in Madagascar and abroad (tour operators, travel media etc.) can speak English.

Starting date

Third quarter of 1996

Length of Contract

Approximately 2 weeks.

Contacts

Kelly Riedesel
Tropical Research and Development
7001 SW 24th Ave.
Gainesville, FL 32607, USA
tel. (904) 331-1886
fax (904) 313-3284
e-mail TRD@MCI.COM

Richard Swanson
Tropical Research and Development
1, rue Naka Rabemanantsoa
Immeuble Santa - Antanimena
Antananarivo 101
Madagascar
tel. 261 2 30518
fax 261 2 31994
e-mail TRDM@MCI.COM

97

ANGAP/TR&D/USAID
Contract No. :623-0110-C-00-1041-00

Scope of Work
STTA#9

COMMUNITY SUPPORT FOR ECOTOURISM/MARKETING/PRODUCT DEVELOPMENT

The Issue

Ecotourism opportunities in and around national parks in developing countries are normally exploited by expatriate entrepreneurs from developed countries. As a consequence support for national parks and ecotourism is not forthcoming from neighboring communities. Moreover, the risk of hostile actions from these communities is very real.

A postulated strategy for reducing such risks and gaining positive community support is to empower neighboring communities to exploit ecotourism opportunities themselves. Around Isalo National Park local communities are already exploiting some opportunities by providing services such as small hotels, guest houses, restaurants, campsites, guiding and curios. While these products and services are to some extent satisfying the current backpacker/adventure travel market, they are of a very low standard. Consequently, they are inadequate to meet the demands of the predicted exponential growth of international tourists to Isalo. If this shortcoming is not addressed by ANGAP, negative feedback can dramatically reverse the current favorable trend in tourism numbers. Moreover, in terms of ANGAP community benefit strategy, it is important that the provision of competitive ecotourism facilities, products and services is not dominated by expatriate entrepreneurs.

General Objectives

The general objective of this study is to provide ANGAP with a policy and procedure for empowering and facilitating the communities around Isalo to :

- raise the standards of the ecotourism facilities, products and services they are currently offering.
- introduce new ecotourism facilities, products and services at an acceptable standard to meet the anticipated exponential growth in tourist numbers.

The above policy and procedure could then be extrapolated to ANGAP's other national parks.

Specific Objectives

To satisfy the above general objective, the specific objectives of this study would be to

- Undertake a situational analysis of the ecotourism facilities, products and services currently being provided by the communities neighboring Isalo.
- Identify future ecotourism opportunities (direct and spin-off) that local communities could potentially exploit.
- Identify the obstacles that are currently limiting the improvement of standards and the expansion of the range of ecotourism facilities, products and services by the communities, e.g. finance, skills, awareness of opportunities, land tenure, ability to manage small businesses, legislation, etc.

98

- Provide ANGAP with recommendations on how to facilitate the improvement of standards and the expansion of the range of ecotourism facilities, products and services provided by local communities.
- Provide a policy framework for reconciling ANGAP's financial sustainability objectives with the objective of encouraging communities to benefit from their direct participation in ecotourism opportunities.

Logistics and Work Relationships

The consultant will report directly to Mr. Roger Collinson, the Parks Operations and Ecotourism Advisor to ANGAP. He will also collaborate closely with the following:

- ANGAP Director of Ecotourism and Marketing
- ANGAP Director of Park Planning and Management
- Isalo Park Manager
- Local communities

Deliverables [Complete draft report must be left with ANGAP and USAID before leaving the country]

A written document that presents the findings of the situational analysis and the recommendations and policy framework described above under the specific objectives.

Site/s of Work

ANGAP head office and the villages neighboring Isalo National Park

Qualifications and/or Years of Professional Experience

A graduate degree in the social sciences and/or economics with at least 5 years experience with the facilitation of micro and small enterprises in third world communities. Experience in ecotourism would be highly advantageous as would previous experience in Madagascar.

Language

FS 3 in French essential while conversational Malagasy would be highly desirable.

Starting date

2nd/3rd quarter

Length of Contract

4 weeks.

Contacts

Kelly Riedesel
Tropical Research and Development
7001 SW 24th Ave.
Gainesville, FL 32607, USA
tel. (904) 331-1886
fax (904) 313-3284
e-mail TRD@MCI.COM

Richard Swanson
Tropical Research and Development
1, rue Naka Rabemanantsoa
Immeuble Santa - Antanimena
Antananarivo 101
Madagascar
tel. 261 2 30518
fax 261 2 31994
e-mail TRDM@MCI.COM

Termes de Reference
STTA #10

CD-ROM PRODUCTION USING GEO-REFERENCED P.A DATA

Problématique

De nombreuses données géoréférencées sur les aires protégées sont désormais disponibles. Il convient de diffuser certaines de ces données auprès de d'un public non spécialistes en matière d'information géographique. La production de CD-ROM où seront combinées divers types de données localisées/localisables (texte, image, son video,...) manipulées selon un interface convivial est un élément déterminant pour valoriser le capital de données existantes et faire connaître les activités de l'ANGAP.

Objectifs généraux

Diffuser les informations relatives au réseau des Aires Protégées et assurer la promotion des activités de l'ANGAP.

Objectifs spécifiques

Développer les compétence du DIVB en établissant un CD-ROM pilote où des informations multimédia géoréférencées sont accessibles à un public non spécialisé. Cet objectif comprend les principaux points suivants:

- Mise au point de scénario
- Choix de logiciel(s) adaptés
- Intégration de données multimédia
- Production de CD-ROM
- Finaliser le programme de travail et le scénario avec le responsable de l'unité SIG et l'assistance technique TR&D.
- Collaborer étroitement et le DIVB de l'ANGAP
- Prendre en compte les bases de données SIG/ANGAP existantes et assurer la conformité aux standards.
- Formation du personnel technique SIG/ANGAP
- Démonstration du CD-ROM pilote à la Direction de l'ANGAP en fin de mission

Les CD-ROM devront être diffusable selon un nombre illimité sans versement de royalties de la part de l'ANGAP aux éditeurs des logiciels utilisés.

Toutes les données utilisées resteront sous l'entière propriété de l'ANGAP (sauf exceptions qui feront l'objet de spécifications contractuelles).

Logistique et contact professionnel

- Le consultant devra indiquer ou fournir les logiciels nécessaires à la réalisation de l'interface utilisateur.
- Le logiciel spécifié devra permettre la consultation de données géoréférencées et être en mesure d'intégrer les formats vectoriels utilisés par le SIG/ANGAP (MapInfo, éventuellement ArcInfo).
- Le DIVB assurera la mise à disposition des moyens informatiques (CD ROM scriptor, ordinateurs, table à numériser, plotter, logiciels SIG: Arc/Info, ArcView, MapInfo, IdrisiW,...) et l'acquisition des logiciels nécessaires.
- Le DIVB mettra une ou deux personnes spécialisées à disposition du consultant pour l'assister (préparation, élaboration de cartes, analyse de données,...).
- Mise à disposition du consultant de moyen de locomotion.

Le consultant travaillera en étroite collaboration avec le responsable de la cellule SIG/ANGAP.

Département principal concerné

Département Information et Valorisation de la Biodiversité (DIVB) de l'ANGAP
Directeur: Mlle Faramalala Miadana Harisoa

Liste des documents à soumettre

- CD-ROM pilote finalisé.
- Rapport sur le déroulement de la mission avec des recommandations pour une acquisition éventuelle d'équipement complémentaire et une estimation des coûts de production.
- Toutes les données utilisées

Lieu de travail
Antananarivo

Qualifications et expériences professionnelles

Personne ayant une expérience solide dans la production de CD-ROM multimédia et gestion de données géoréférencées.

Capacité linguistique

Il est souhaitable que le consultant comprenne et parle le français.

Début de contrat

Avril/mai, 1996

Durée du contrat

18 jours, y compris la rédaction des rapports et la production du CD-ROM finalisé.

CONTACT

Kelly Riedesel
Project Coordinator
Tropical Research and Development
Gainesville, Florida
Tel: 1 352 331 1886
Fax: 1 352 331 3284
e-mail: kr@trd.com

Termes de Reference
STTA #11
AERIAL VIDEO MONITORING

Problématique

Le système de suivi évaluation des PCDI et de l'ANGAP comprends certains indicateurs fondamentaux relatifs à l'occupation du sol dans des zones pilotes ciblées. Des données précises doivent être collectées annuellement et analysées spatialement à l'aide des systèmes d'information géographiques utilisés à l'ANGAP.

Objectifs généraux

Le suivi de l'évolution de l'occupation du sol dans des zones ciblées est destiné à évaluer objectivement l'impacts des activités des PCDI sur les ressources naturelles.

Objectifs spécifiques

Recueillir des données géoréférencées sur des zones pilotes dans 4 ou 5 PCDI. Ces données video/photo devront être intégrées dans les bases de données SIG/ANGAP, comparées aux données de référence existantes et analysées pour produire des cartes/statistiques sur l'évolution de l'occupation du sol.

Un système vidéo couleur simple (Hi8) devrait être suffisant.

Toutes les données recueillies et traitées durant cette mission resteront la propriété intégrale de l'ANGAP.

- Finaliser le programme de travail avec le responsable de l'unité SIG et l'assistance technique TR&D (choix de l'avion, priorisation des sites, etc.)
- Collaborer étroitement et le DIVB de l'ANGAP
- Prendre en compte les bases de données SIG/ANGAP existantes et assurer la conformité aux standards.

Logistique et contact professionnel

-Le consultant devra fournir les équipements nécessaires à la prise de vue géoréférencée (video, système GPS, système de montage sur avion léger,...)

Le DIVB assurera la mise à disposition des moyens informatiques (ordinateurs, table à numériser, plotter, logiciels SIG: Arc/Info, ArcView, MapInfo, IdrisiW,...)

Le DIVB mettra une ou deux personnes spécialisées à disposition du consultant pour l'assister (préparation, élaboration de cartes, analyse de données,...) et un ordinateur portable si nécessaire.

- Mise à disposition du consultant des moyens de locomotion.

Mise à disposition d'un avion léger.

Le consultant travaillera en étroite collaboration avec le responsable de la cellule SIG/ANGAP.

Département principal concerné

Département Information et Valorisation de la Biodiversité (DIVB) de l'ANGAP

Directeur: Mlle Faramalala Miadana Harisoa

Liste des documents à soumettre

- Rapport sur le déroulement de la mission avec des recommandations pour une acquisition éventuelle d'équipement vidéographiques par l'ANGAP.

Toutes les données collectées (plans de vol, films vidéo, photos, fichiers informatiques,etc.)

Rapport d'analyse de données (méthodes, cartes d'évolution, statistiques, indicateurs)

Lieu de travail

Antananarivo, et 4 ou 5 PCDI

Qualifications et expériences professionnelles

Personne ayant une expérience solide prise de vues vidéo aérienne géoréférencées et intégration/analyse de données SIG.

Capacité linguistique

Il est souhaitable que le consultant comprenne et parle le français.

Début de contrat

Avril/mai

Durée du contrat

48 jours, y compris les analyses de données et la rédaction des documents.

CONTACT

Kelly Riedesel
Project Coordinator
Tropical Research and Development
Gainesville, Florida
Tel: 1 352 331 1886
Fax: 1 352 331 3284
e-mail: kr@trd.com

Dr. Richard Swanson
Chief of Party
Tropical Research and Development
Antananarivo, Madagascar
Tel: 011 261 2 30518
Fax: 011 261 2 31994
e-mail: trdm@mcimail.com

ANGAP/TR&D/USAID
Contract No. : 623-0110-C-00-1041-00

Termes de Reference
STTA #12

BIODIVERSITY DATA BASE DESIGN

Problématique

La réalisation du mandat du Département Information et Valorisation de la Biodiversité (DIVB) est logiquement dépendante de l'utilisation des données pertinentes. De nombreuses données existantes sont actuellement disparates pour être exploitables. Aussi, la mise en place d'une base de données cohérentes sur la biodiversité est indispensable en tant qu'outil de gestion.

Objectifs généraux

Un des objectifs principaux de l'Unité Nationale de la Biodiversité et le Département Information et Valorisation de la Biodiversité de L'ANGAP est la gestion de la biodiversité tant au niveau des Aires Protégées qu'au niveau national. Cela inclut la surveillance des espèces et la mise en place d'une politique nationale de gestion.

La mise en place de la base de données sur la biodiversité constituera un outil efficace pour la surveillance des espèces et la mise en oeuvre de la politique nationale.

Objectifs spécifiques

- Etablir la structuration des bases de données sur la biodiversité selon la méthodologie indiquée ci-après, notamment en assurant la conformité aux standards internationaux et l'intégration des données disponibles dans les principales bases de données actuelles;
- Former la personne responsable de l'utilisation de ces bases.
- Collaborer étroitement et le DIVB de l'ANGAP
- Evaluer les ressources existantes (humaines, matérielles, données...)
- Prendre en compte les bases de données existantes notamment, les acquis du Pré-Gef et le SIG/ANGAP
- Assurer la conformité aux principaux standards internationaux.

Logistique et contact professionnel

- Le DIVB assurera la mise à disposition des matériels informatiques pour la réalisation de la consultance
- Mise à disposition du consultant des moyens de locomotion.

Le consultant travaillera en étroite collaboration avec le responsable de la cellule valorisation de la Biodiversité en ce qui concerne les données biologiques et avec celle de la maintenance informatique pour ce qui concerne les matériels informatiques

Département principal concerné

Département Information et Valorisation de la Biodiversité (DIVB) de l'ANGAP
Directeur: Mlle Faramalala Miadana Harisoa

Liste des rapports à soumettre

- Dossier d'analyse;
- Structure des bases de données;
- Rapport de formation;
- Code source disponible;
- Calendrier de mise en oeuvre de la base de données et de l'opérationnalité de la base de données

105

Lieu de travail

Antananarivo, éventuellement déplacements pour visiter 1 ou 2 PCDI

Qualifications et expériences professionnelles

Une personne ayant:

- une expérience en structuration de bases de données sur l'environnement, notamment en biodiversité, dans le contexte international
- une connaissance en programmation (Paradox, MS-Access...)
- une connaissance approfondie des standards internationaux en matière de base de données sur la biodiversité

Capacité linguistique

Il est souhaitable que le consultant comprenne bien et parle le français.

Début de contrat

Avril 1996

Durée du contrat

5 semaines, y compris la rédaction des documents

CONTACT

Kelly Riedesel
Project Coordinator
Tropical Research and Development
Gainesville, Florida
Tel: 1 352 331 1886
Fax: 1 352 331 3284
e-mail: kr@trd.com

Dr. Richard Swanson
Chief of Party
Tropical Research and Development
Antananarivo, Madagascar
Tel: 011 261 2 30518
Fax: 011 261 2 31994
e-mail: trdm@mcimail.com

Termes de Reference
STTA #13
PROFESSIONAL DOCUMENTATION SUPPORT TO ANGAP

Problématique

La gestion du réseau d'Aires Protégées exige une bonne gestion des informations et des documents de l'ANGAP. Les antennes régionales et les opérateurs commencent à recourir au service de l'Organisme -mère concernant les documents dont ils ont besoin pour bien réaliser leurs mandats. ANGAP gère de plus en plus les AP, et les informations doivent circuler beaucoup plus qu'auparavant. Après cinq années d'existence bon nombre de documents doivent être relegués aux archives. Des dispositions doivent être prises pour gérer ces documents semi-actifs.

Il n'est pas toujours facile de réperer la place des documents dont on a besoin dans un minimum de délai vu le nombre croissant des documents générés par les activités de l'ANGAP. Or l'impact de cette recherche est considérable, du non accomplissement des activités aux perturbations de la gestion du temps.

Objectifs généraux

Une informatisation des informations de l'organisme s'impose, que ce soit ouvrage ou documents d'une page. Pour cela, il est indispensable de procéder au paramétrage de la base de données informatisées. D'où la nécessité de recourir à un consultant qui maîtrise le logiciel choisi par ANGAP (TEXTO sous Windows) et qui a déjà procédé à l'identification des besoins de l'UID/ANGAP.

Objectifs spécifiques

Paramétrage de la base de données dans texto sous windows
Initiation utilisation du logiciel
Identification besoin en formation pour l'exploitation du logiciel
Suivi jusqu'à l'opérationalité de la base.

Logistique et contacts professionnels

Achat logiciel texto sous windows au réseau Ibiscus et disponibilité autres applications bureautiques (winword, notepad, ...)
Travail étroit avec le documentaliste; contact avec directeur du département

Département principal concerné

Département de la Valorisation des Ressources Humaines et de la Communication de l'ANGAP.
Directeur: Rakotoarisoa Jacqueline

Rapports à soumettre

(Une version préliminaire complète du rapport final doit être soumis à l'ANGAP et l'USAID avant le départ du consultant)
Un document où figurent les paramètres de la base de données documentaires
Une proposition de formation pour l'exploitation de la base et connexes
Un rapport sur l'appréciation du fonctionnement de la base lors de la deuxième consultation (suivi)

Lieu de travail

UID/ANGAP

Qualifications et expériences professionnelles

Etudes universitaires en gestion documentaire
Plus de cinq années d'expériences de la formation en gestion documentaire
Connaissance du logiciel texto sous windows

Capacités linguistiques

Maitrise du français écrit et parlé

Début du contrat

Mai 1996

Durée du contrat

2x 10jours (y compris la rédaction des rapports)

- Une semaine au mois de Mai pour le paramétrage de la base de données documentaire.
- Une semaine au mois de Septembre pour suivi et complément à d'éventuelles lacunes.

CONTACT

Kelly Riedesel
Project Coordinator
Tropical Research and Development
Gainesville, Florida
Tel: 1 352 331 1886
Fax: 1 352 331 3284
e-mail: kr@trd.com

Dr. Richard Swanson
Chief of Party
Tropical Research and Development
Antananarivo, Madagascar
Tel: 011 261 2 30518
Fax: 011 261 2 31994
e-mail: trdm@mcimail.com

Termes de Reference
Training Support
STTA #14
Indexing Support to ANGAP's Documentation Center

Problématique

La nouvelle orientation de l'ANGAP exige une célérité accrue dans le domaine de l'information. Les activités de l'ANGAP génèrent beaucoup de documents (recherche, rapport, mémoire,...) qu'il faut gérer en vue de leur exploitation possible. Les ouvrages qui entrent à l'Unité d'Information Documentaire (UID) de l'ANGAP seront très vite noyés dans le nombre. Et les documents seront virtuellement inexistant sans un stockage approprié des documents et des informations.

Objectifs généraux

Une analyse des documents (ouvrages, documents, périodiques) devrait être entreprise. Il s'agit d'extraire les mots-clés standardisés qui permettraient de décrire le contenu d'un ouvrage ou d'un article en fonction des mandats de l'ANGAP et de l'orientation de ses activités.

Objectifs spécifiques

L'indexation de 1800 ouvrages et périodiques doit être effectuée pour qu'une mise en place de base de données bibliographiques puisse être réalisée avant son paramétrage et la saisie.

Logistique et contacts professionnelles

Les indexeurs feront l'extrait des mots-clés standardisés (descripteurs) à partir du thésaurus AGROVOC. Un bordereau de saisie est à leur disposition à cet effet.

Les descripteurs qui ne figurent pas dans le thésaurus seront consignés dans un champ prévu à cet effet.

Un résumé succinct accompagnera l'analyse.

Les indexeurs travailleront sous la supervision du Documentaliste.

Département principal concerné

Le Département de la Valorisation des Ressources Humaines et de la Communication

Directeur: Rakotoarisoa Jacqueline

Résultats attendus

- 1800 documents indexés et résumés jusqu'au mois d'Avril 1996.
- 1800 autres peuvent être effectués après la mise en place du réseau documentaire des AP quant la base de données bibliographiques de l'ANGAP sera en place.

Lieu de travail

UID/ANGAP

Qualifications et expériences professionnelles

Institutions nationales ayant plus de cinq ans d'expérience dans la gestion de base de données.

Début du contrat

Mars

Durée

2x60 jours (Mars et Octobre)

CONTACT

Kelly Riedesel
Project Coordinator
Tropical Research and Development
Gainesville, Florida
Tel: 1 352 331 1886
Fax: 1 352 331 3284
e-mail: kr@trd.com

Dr. Richard Swanson
Chief of Party
Tropical Research and Development
Antananarivo, Madagascar
Tel: 011 261 2 30518
Fax: 011 261 2 31994
e-mail: trdm@mcimail.com

ANGAP/TR&D/USAID
Contract No.: 623-0110-C-00-1041-00

Scope of Work
STTA #15
Technical Assistance to ANGAP COP Dr. Richard Swanson

The Issue

Dr. Swanson's responsibilities presently entail technical assistance to ANGAP in administration and management, as well as monitoring and evaluation field assistance, reporting requirements, re-engineering assistance requirements and much more. TR&D proposes qualified technical assistance during the heaviest period of each quarter, at the end when quarterly reports are due, in order to allow Dr. Swanson to give his full attention in particular to the M&E program which has been defined in this years annual work plan. This program is very ambitious but doable with some support from the TR&D home office.

General Objectives

TR&D proposes the TR&D project manager, Dr. Pauline Wynter, provide 10 days of technical assistance, including days of travel, to assist Dr. Swanson in the specific objectives defined below. The field team has budgeted 5 person weeks of Pauline's time for this purpose, for the end of March, June, September, and December, 1996.

Specific Objectives

1. Support to the TR&D Chief of Party in completing the first quarter of 1996 report to USAID.
2. Support to ANGAP's Department of Administration/Finance on moving forward with a program for ANGAP's role in Tany Meva, and with support to efforts with the McArthur Foundation. This latter is defined in greater detail in the 1996 annual report, with the relevant sections highlighted in an annex to this request.
3. Support to ANGAP in reviewing use of USAID's marketing/publicity seed money, including development off new, profitable ideas. The consultant will describe fully what ANGAP has done to date with this money, with a review of its accounting. The consultant will also review what ANGAP is doing with other money provided tot he Shop for marketing adventures.

Logistics and Work Relationships

Principal ANGAP Department Concerned

The consultant will work with both the Department of Ecotourism and Marketing, and the Department of Administration and Finance.

Deliverables [Complete draft report must be left with ANGAP and USAID before leaving country]

1. Completed Quarterly Report
2. Plan of action, agreed to by ANGAP and Tany Meva, of the specific course of action to be taken, with a time-table. This should include an investment plan with Tany Meva for ANGAP.
3. Report detailing the issues of MacArthur Foundation support, problems encountered, and an action plan, agreed to by ANGAP, of the next steps.
4. Report on the USAID marketing/publicity seed money, including development of new, profitable ides which ANGAP's Department of Ecotourism and Marketing is prepared to follow.

Site/s of Work

ANGAP head office in Tana.

Qualifications and/or Years of Professional Experience

These terms of reference require the support of the TR&D ANGAP Institutional Contract project manager, Pauline Wynter, who is intimately familiar with the issues to be addressed in this consultancy and can provide the necessary support required the TR&D's chief of party.

Starting date

March 20, 1996

Length of Contract

A maximum of 8 work days in Tana, including write-up, with 2 days authorized for international travel.

Contact

Kelly Riedesel
Project Coordinator
Tropical Research and Development, Inc.
Gainesville, Florida
Tel: 1 352 331 1886
Fax: 1 352 331 3284
E-Mail: KR@TRD.COM

Dr. Richard Swanson
Chief of Party
Tropical Research and Development, Inc.
Antananarivo, Madagascar
Tel: 011 261 2 30518
Fax: 011 261 2 31994
E-Mail: TRDM@MCIMAIL.COM

112

Annex 5: 1996 Institutional Support

Table 5: ANGAP Organigram in 1996 and Beyond

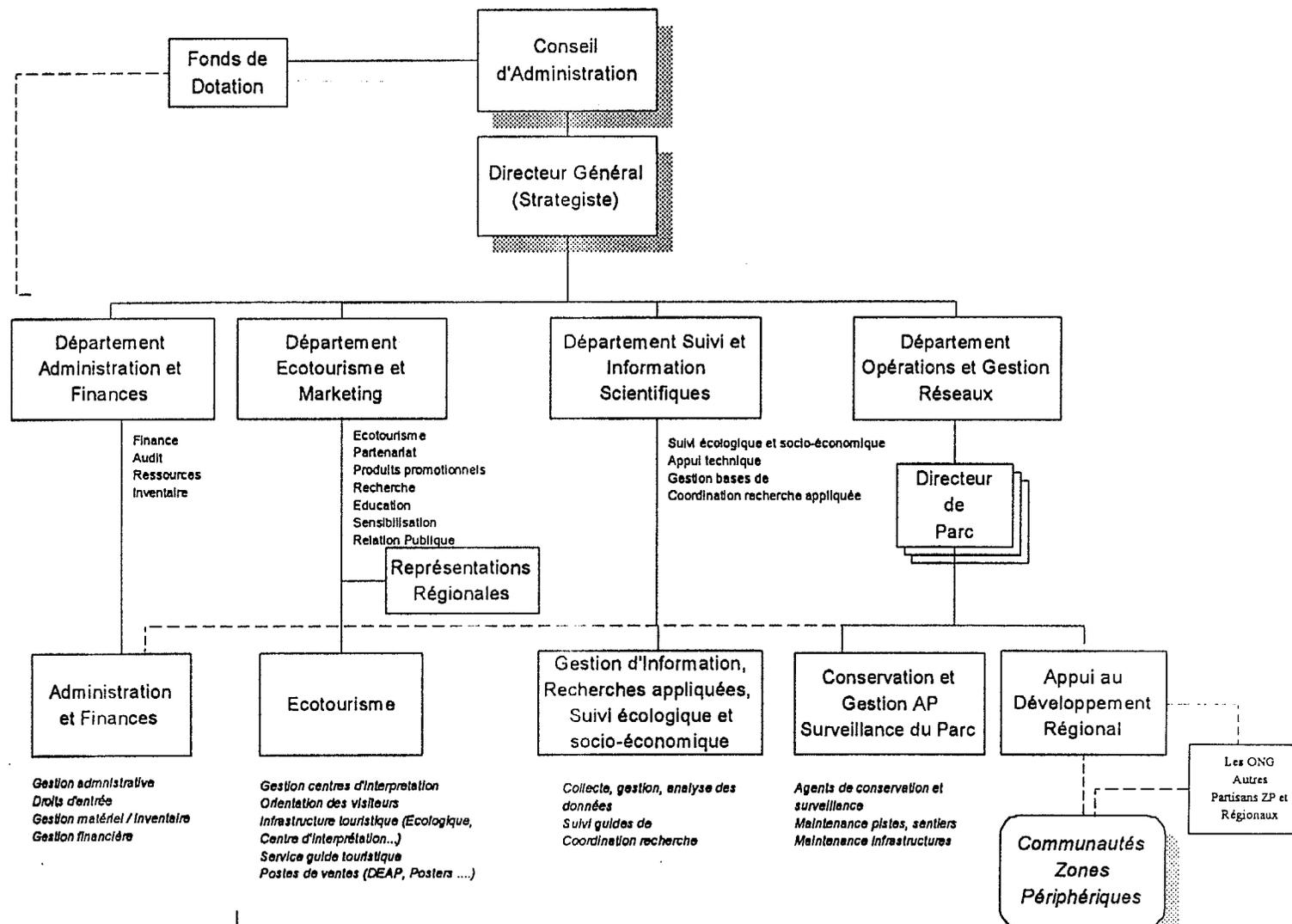
Table 6: Training and Workshops Planned for 1996

Table 7: 1996 Short Term Technical Assistance

Table 8: Long-term Technical Assistance Scopes of Work (Revised January 1996)

113

ORGANIGRAMME GENERAL POUR PARC NATIONAL ET RESERVE



NOTES:

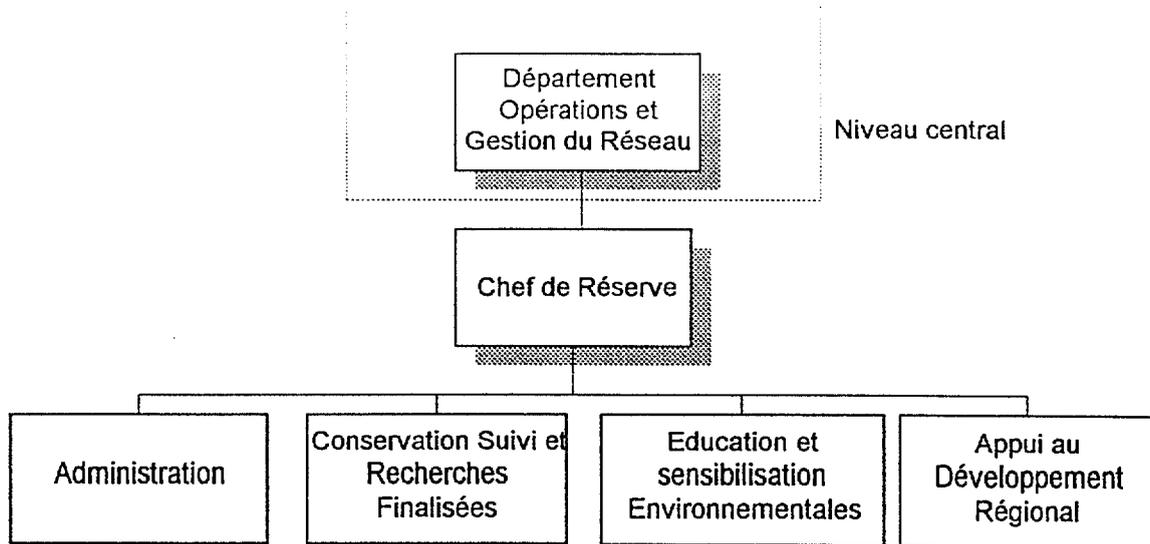
— = Ligne Fonctionnelle

- - - = Ligne Support

114

ORGANIGRAMME POUR PARC NATIONAL & RESERVE

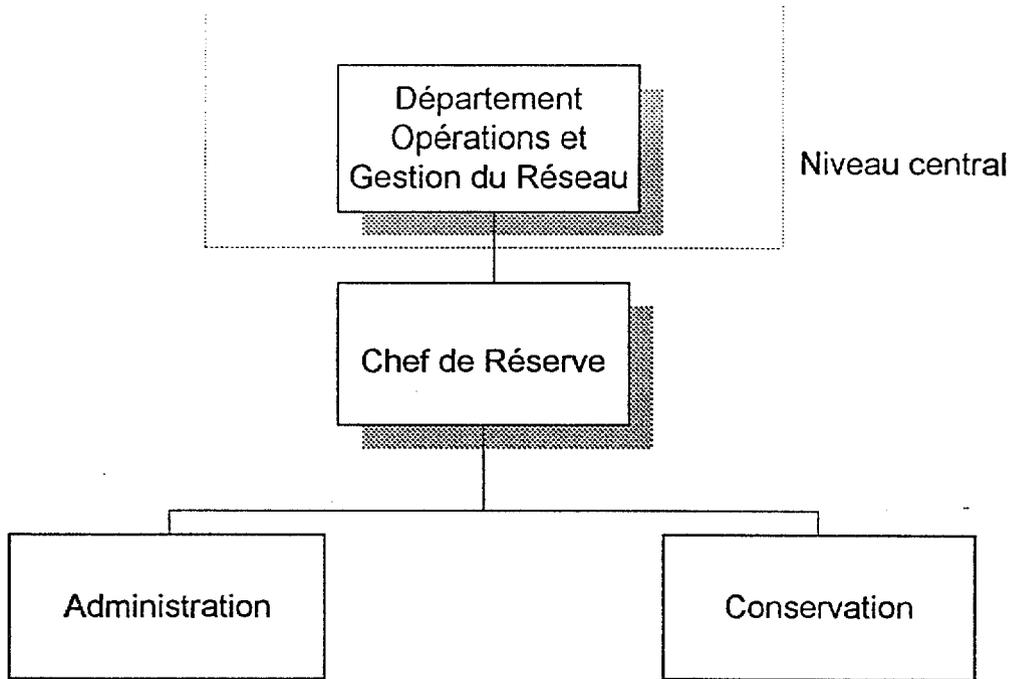
NIVEAU B



115

ORGANIGRAMME POUR PARC NATIONAL & RESERVE

NIVEAU C



BEST AVAILABLE COPY

ANNEX 5: TABLE 6: TRAINING AND WORKSHOPS PLANNED FOR 1996

FEB. 1996

Department	Topic	Dates	Dates held	# of Part.	# of Days	Person/ Days Training	Lead Trainers/Firm	Intended for Whom	Total Budgeted	Total Obligated	Balance in \$
PARK Operations & Management	1A: Mission to Malawi and S. Africa (1)								17,000		17,000
	1. Study Visits for PARK Operations to Africa (7 people)			1	14						0
	1B: South African Homeland Parks (6)			40	4		Collinson	4 Park Managers (Isalo, Ankarana, Ranomafana, Andohahela)	6,000		6,000
	2. Reunion Annual des Directeurs des Parc et Reserves & PCDI			20	3			DIRNATS, Park and Reserves Managers	3,000		3,000
	3. Team Building DEF and ANGAP			3	10			ANGAP & DEF	5,000		5,000
	4. Uganda Exchange Visits (3 ANGAP personnel)			10	5			Priority Park personnel	2,000		2,000
	5. Trail Design and Construction Training (at Isalo)			1	5		IUCN	ANGAP Director of Operations	6,000		6,000
	6. Annual ICOM Parks and Reserves International Meeting			5	10			Isalo Chefs de Volet	15,000		15,000
	7. Study Visit of Isalo Chef de Volet Personnel to Africa						National Parks Board	ANGAP, Parks and Reserves	8,000		8,000
	8. Misc. travel & per diem to support S.A. Parks Board	Various									
	Imprvu								5,000		5,000
	SUBTOTAL								67,000	0	67,000
Ecotourism & Marketing	1. Management workshop (marketing, business management, communications) (includes travel, per diem of SA people)			50X3	3X3	0	National Parks Board	ANGAP and Parks, Reserves, ICDPs	15,000		15,000
	2. Training of Tourist Guide Trainers, Guide Training			30X4	5X4		ANGAP & Private Sector	Priority Parks with guide services	5,000		5,000
	3. Seminar with Private Tour Operators			60	2		ANGAP	ANGAP & Private Sector (Tourism)	6,000		6,000
	4. Architecture of Interpretation Centers, Surveillance			4	10		MBAADA	Isalo, Ranomafana, Ankarana, Ambohitantely	1,000		1,000
	5. Study Tour to Banff Canada (Airline Ticket)				10		Banff Ecotourism Centre	Director of Department	5,000		5,000
	6. Class Visits (Field Trips for Children into Parks)			20X3	2X3		ANGAP	Children in communities around parks/reserves	2,500		2,500
	7. World Environment Day						ANGAP	Urban Communities- Environmental Ed.	1,000		1,000
	8. Interpretation Center Exposition Seminar (in Ranomafana)			20	4		Ranomafana	Isalo, Ankarana, Andasibe, Andohahela	3,000		3,000
	9. Study Trip to S. Africa (possibly other African country)			3	8		Collinson	DG, Jackie, Parfet (Isalo), other ecot. personnel	9,000		9,000
	10. Training for Documentation Center Personnel (2.8 wk. Course)	May-June				0	DIVB & Gasssi STTA	ANGAP Documentation Center Staff	6,500		6,500
	11. Documentation Indexing (local hire help)	May-June					CIDET Local Consultant	ANGAP Documentation Center Staff	6,000		6,000
		Divers Imprvu							5,000		5,000
	SUBTOTAL							70,000	0	70,000	
USA	1. Trainers Training			25	4		ANGAP	PARKS and Reserve Staff	3,000		3,000
	2. Training of Financial Staff of Parks and Reserves			20	3		ANGAP	Finance Staff of Parks and Reserves	4,000		4,000
	3. Misc. Meetings (Usually 1 day length, held in Tana hotel)			45	1		ANGAP		2,500		2,500
	4. Study Tour Trust Fund (France)			1	20		DAF Staff		6,000		6,000
	5. Study Tour Indonesia (Trust Fund)			1	20		DAF Staff		7,000		7,000
	6. CRE Training of Trainers								13,000		13,000
	Divers Imprvu							10,000		10,000	
	SUBTOTAL							63,500	0	63,500	
DIVB	1. Annual M&E Workshop (socio-economic/ecological)	March-December				0	DIVB/USEP	M&E Parks & Reserves Staff, ICDPs	6,000		6,000
	2. M&E Field Training for Impact Surveys	April		15	40	0	Local Consultants (Abs)	ICDP M&E field staff	7,000		7,000
	3. Photo Interpretation	April-September		10	40		CFSIO/ICDPs	Park/Reserve/ICDP staff	6,000		6,000
	4. Aerial Videography for M&E Impact (two visits)	May		1	25		ANGAP/TR&D	Park/Reserve/ICDP staff	4,000		4,000
	5. Vegetative Classification/Interpretation/Impact Monitoring	May - October		16	10		University of Tana	DIVB & Park/Reserve/ICDP staff	3,000		3,000
	6. GIS training	June		20	3		SFSIO/Tana	Park/Reserve/ICDP staff	2,000		2,000
	7. Workshop on GIS	June		30	3		ANGAP/TR&D	DIVB & Park/Reserve/ICDP GIS staff	1,500		1,500
	8. Workshop on biodiversity research	June		6	5		ANGAP/TR&D	DIVB and Park/Reserve/ICDP staff	3,000		3,000
	9. Data Quality Control	June		3	10		CFSIO/Tana	Park/Reserve/ICDP staff	4,000		4,000
	10. Modelling and development CD ROM production	July		3	5		De Vinci, Tana	DIVB	2,000		2,000
	11. Taxonomy	July		3	5		ANGAP/U. of Tana	DIVB staff	1,000		1,000
	12. Relational Data Base Management	August		8	5		CFSIO/Tana	Park/Reserve/ICDP staff	4,000		4,000
	13. Basics in Remote Sensing	August		16	5		CFSIO/Tana	Park/Reserve/ICDP staff	3,000		3,000
	14. Network Maintenance: TCP/IP	September		1	10		Training in USA	DIVB	6,000		6,000
	15. Biodiversity Convention Regional Meeting	September		1	5		UNEP/Seychelles	DIVB	4,000		4,000
	16. Annual CITES meeting	October		2	10		CITES/Zimbabwe	DIVB	10,000		10,000
	17. Annual International Biodiversity Convention	November		1	5		UNEP/Argentina	DIVB	7,000		7,000
	Divers/Imprvu					0	DIVB		5,000		5,000
	SUBTOTAL							78,500		78,500	
	SUBTOTAL							279,000		279,000	

About \$48,000 not spent in 1994, with another \$25,000 returned from Ministers visit \$91,000 left unspent in 1995. Budgeted for 1996: \$143,000. Remaining Training Budget: \$307,983

0 person months of training

Imprvu: \$ 28,983

BEST AVAILABLE COPY

ANNEX 5: TABLE 7: 1996 SHORT TERM TECHNICAL ASSISTANCE

February 22, 1996

Total STTA in contract = 40 pm.
TR&D Budget Line Item 45-21

DUTIES	# of Weeks Prog.	# of Weeks Used	Dates Planned	SOW Done?	Mission Clearanc	Date Arrived	Date Depart	Date Draft	Date Final	Trans?	Budgeted	Actual Cost	Balance	Name
Aerial Videographic Monitoring		8	May/June	Y							\$ 13,440			Dana Slymaker ?
CD-ROM Production of Protected Area Data		3.5	June	Y							\$ 5,880			R. PENNEMAN ?
Trust Fund (Pauline) (March, June, Sept, Dec)		5	March, J, S, D	Y							\$ 8,400			Pauline Wynter
Ecotourism and Marketing (4 Priority Parks, Interpretation center Plannin		10	Jan-April	Y	Y	Jan. 7					\$ 16,800			Roger Collinson
Platinum Training (Training)		2	May	Y							\$ 3,360			?
Appropriate Framework to Foster Private Sector Involvement		2.8	March	Y							\$ 4,704			Richard Davies
Madagascar Domestic Ecotourism Market (Private Sector)		2.8	May	Y							\$ 4,704			Francois Odendal
International Marketing Study		4	2nd Quarter	Y							\$ 6,720			Landel Mills ?
Community Support for Ecotourism/Marketing/Product Development		4	3rd Quarter	Y							\$ 6,720			?
Community Management of Natural Resources (ZOC, ZUC)		8	2nd Quarter	Y							\$ 13,440			Mario Gauthier
Biodiversity Database Design (Training) (5 wks)		5	Apr/May	Y							\$ 8,400			?
Support to Studies of Lessons Learned, Case Studies, Hypothes. Testing		8	3rd Quarter	N							\$ 13,440			Della McMillan
Support to Drawing up ANGAP's Legal Legislation National Parks Act		2	3rd Quarter	N							\$ 3,360			?
Support to ANGAP Marketing		2	2nd Quarter	Y							\$ 3,360			?
Support to ANGAP Pricing Policy		1	2nd Quarter	Y							\$ 1,680			?
		68									\$ 114,408			
		15.1	person months											

STTA, International \$280/day plus PD

STTA, Local \$100/day (all exp.)

Man Weeks are calculated at \$280/day * 6 days/week or \$6,160/month

Man Weeks for STTA for expatriate and local consultants are combined in table (local 1/3 of expatriate)

12

Table 8: Long Term Technical Assistance Scopes of Work

I. Impact Monitoring and Program Evaluation Specialist (34/40 months):
Dr. Richard Swanson

A. Scope of Work

The M&E Specialist will work within ANGAP to provide technical assistance and training in data system design, collection, processing and analysis for the implementation of the impact monitoring and program evaluation component. Impact design should include both biological and socio-economic indicators and provide explicit logical assumptions linking the two data sets.

Specific responsibilities will include:

- Assist the Director and staff of ANGAP's Department of Planning, Monitoring and Evaluation to develop appropriate, cost effective management and impact indicators and associated data collection methodologies for use by all ICDP operators. Impact design could include both biological and socio-economic indicators and provide explicit logical assumptions linking the two data sets.
- Serve as an advisor to the SAVEM Grants Management Unit to ensure the systems also respond to the requirements for testing the conservation and development hypothesis called for in the Project Paper as well as the project management needs of the individual protected areas.
- Provide technical assistance and training in data system design, collection, processing and analysis for the implementation of the impact monitoring and program evaluation component.
- Train and advise ICDP operator staff in ANGAP's standardized monitoring and evaluation methods, development of project specific indicators, data collection systems and methodologies as well as field level data entry and processing. Emphasis will need to be placed on practicability with actual work in the field.
- Work with the Chief of Party for the GMU to make sure that NGO grants in protected areas have a monitoring and evaluation plan to test and measure the impact of strategies for effective protected areas management.
- Coordinate with the ANGAP/DIVB and the SAVEM project GIS Advisor in the design and implementation of data collection and analysis and the integration of project level socio-economic and biological data into ANGAP's geographical information system.
- Establish procedures, schedules and criteria for ANGAP staff to monitor and evaluate the programs of field operators working in protected areas and their peripheral zones.

- Train and organize the staff of ANGAP to apply these procedures in consonance with ANGAP's evolving role, including the installation of computerized tracking system in the DIVB/SIG.
- Assist in the establishment of procedures for identifying and evaluating various systems used to manage protected areas.
- Set up a monitoring and information system to make this knowledge and experience available to all operators in protected areas, as potential conservation NGOs or field operators wishing to initiate activities in new protected areas.
- Participate in the annual review and monitoring of ICDPs. From observations of NGO grantee activities and operations to protect areas of environmental and economic importance based on data analysis from the M&E systems.
- Create and put into practices procedures to allow a regular exchange of ideas and lessons learned on the effectiveness and impact of various strategies to manage protected areas through conservation and development.
- Support to the development of community based natural resource management contracts with the local communities within designated zones located within the protected areas (e.g ZOC and ZUC).

STTA Support

- Support to the establishment of a window within the Tany Meva Foundation, working in close collaboration with Tany Meva and the Mac Arthur Foundation.
- Developing guidance on the management of Category B and C protected areas and in identifying potential partners in the management of the areas.
- Support the analysis of household level impact studies currently underway in all 6 SAVEM ICDPs, and assist in drawing lessons for the hypothesis testing portion of the SAVEM ICDPs.

B. Qualifications

Candidates for Impact Monitoring and Program Specialist should have experience in the design and management of social science data collection/processing systems. Though specific experience relating socio-economic data with resource use would be ideal, a strong background in farming systems research would also be acceptable. Since the positions that of trainer/advisor, excellent communication and interpersonal experience is desirable. Oral French level at FSI 3 is required. Remote sensing experience is desirable.

II. GIS Technical Advisor (36/42 person months):
Mr. Jean-Michel Dufils

A. Scope of work

- Identify with ANGAP the appropriate institutional framework for the geographical information system and for provision of other required services to ANGAP/SIG for biodiversity and socio-economic planning and analysis, such as the digitizing of base maps.
- Evaluate, select and maintain computer data base and GIS software in conjunction with the USGS, ANGAP and operators and other technical specialists. Emphasis should be placed on selection of systems that can be adequately serviced locally.
- Work in collaboration with USGS and ANGAP in identification of appropriate satellite image products for utilization in conjunction with the SIG.
- Coordinate the development of data collection systems to include standardized procedures for recording and storage of ongoing biophysical and socio-economic inventory data. A particular emphasis will be placed on geographical referencing of this data.
- Compile existing flora and fauna distribution data (museums, publications, etc.) and assess its reliability - particularly the geographical referencing of this data.
- Identify and coordinate training and short term services (including FTM and USGS) required for the GIS/data base to train and support senior Malagasy professionals in the GIS/data base.
- Assist ANGAP in the formulation of recommendations for a National Biodiversity policy.
- Work with ANGAP, operators, researchers, DEF, ONE and others to set priorities for the biodiversity data bank.
- Work closely with operators to develop the hub and spoke concept of the SIG.
- Monitor biological and socio-economic data collection from protected areas and surrounding buffer zones. Based on regular analysis of this data, promote scientific follow-up of the biodiversity situation in protected areas, and advise the DG of ANGAP procedure policy recommendation for the long-term direction of biodiversity conservation activities.

B. Qualifications

Candidates for the GIS Advisor should have a strong background in geographical information systems and computer data base management. Remote sensing training and experience is highly desirable including digital image processing and classification. Experience with Global Position Systems is also desirable. Good communication/training skills and a French level of at least FSI 3 are required to enable the transfer of skills to ANGAP personnel.

III. Parks Management and Ecotourism (Systems)
Advisor (21 person months)
Mr. Roger Collinson

A. Scope of Work

The responsibilities of the Park Management and Ecotourism Advisor will be in two domains to assist ANGAP preparation for its long-term institutional role in biodiversity conservation in Madagascar. The first would be in its development into a National Parks Service and the second would be to assist ANGAP and the field operators in establishing effective management of the parks and reserves in Madagascar.

(1) Establishment of ANGAP as a National Parks Service.

- Assist ANGAP to examine short and long-term policy and planning issues in order to establish a technically and professionally credible mandate for ANGAP as a National Park Service and ensure biodiversity conservation in Madagascar and the subsequent development of a "National Parks Act" or similar legal framework.
- Create and sustain a forum for dialogue of needed policy and administrative changes based on an analysis of the constraints to current existing laws and procedures, and the impact of recommended changes. Assure the coordination of this dialogue with on DEF and other relevant GRM Ministries, and NGO and local community operators in the environment sector.
- Establish a schedule and mechanism to assist ANGAP to periodically review and refine the role, purpose, and objectives of ANGAP in their role as National Park Service and the implementation of a national policy on biodiversity.
- Participate in joint GRM, NGO and multi-donor elevation of ANGAP periodically during EAP implementation, to assess its present and future role as a National Parks Service systems manager with direction operational responsibility for park management.
- Strengthen long term institutional support through the concept of a Sister Parks System with the South Africa's National Parks Board (and other national park systems as appropriate) and by exploring links with IUCN.
- Assist ANGAP in putting into place an organizational structure for a National Park Service and ensure the smooth cooperation between ANGAP's functional and service departments and increased delegation of authority to Park Directors at the field level.
- Assist ANGAP in establishing standards as pertains to the management and

124

quality of all visitor services in the national parks and reserves, including visitor facilities, interpretation centers, etc.

- Advise ANGAP on methods to improve communications within the parks and reserves system to enhance staff morale, comprehension, and commitment to the long-term goals of ANGAP.
- Assist ANGAP's Department of Marketing and Ecotourism to ensure future financial security by maximizing the effectiveness of marketing strategies and policies and coordinating their promotional activities with the private sector, while also developing additional Parks and Reserves tourist package product.
- Maintain close liaison with the Ministry of Tourism, national and international tourist industry, the private sector and ensure mutually supportive roles for the development of ecotourism in Madagascar based on public perceptions of the National Park and Reserves and ANGAP.

2. Direct Management of Parks and Reserves

- Guide the park management development process in all three categories of parks and reserves defined by ANGAP, using short term technical assistance as needed.
- Support the establishment of park management plans in all parks and reserves, giving priority to those parks with ecotourism potential.
- Support the operators in the priority parks of Ranomafana, Amber Mountain, Andasibe, and Isalo and others as determined by ANGAP in the establishment of effective park operations.
- Assist ANGAP and the operators in an effective transition from the current ICDP operator management system to direct operational management of these parks and reserves by ANGAP.
- Guide park managers and their staff in the process of developing and improving the quality of all visitor services of national parks (visitor facilities, interpretation centers, etc.).
- Determine carrying capacities for parks with high tourist impact, using applied research assistance.
- Provide advise to technical services within priority parks and reserves, including maintenance, roads, and construction.
- Assess the training plans/programs of field operators for park and reserve staff to ensure that they are consistent with national policies and training needs for

125

protected area management.

B. Qualifications

The advisor should have at least a Master's degree in a field relevant to park operations management (natural resources, resource economics, management, marketing, social sciences). More importantly, the advisor should have extensive long-term experience within a developing country's park service program. Preference will be given to candidates with experience in semi-autonomous park systems (e.g South African National Parks Board). A strong background in ecotourism, experience in commercial management of profit-oriented parks system, and proven professional business skills are essential. Ability to speak, read, and write in French at a level FS-3 or above is desirable.

Chief of Party Duties

The following are specific responsibilities of the Contractor Chief of Party. The COP position is presently fulfilled by the Impact Monitoring and Evaluation Specialist. Upon completion of the M&E Specialist's contract, it is anticipated the COP position will be filled by the Parks Management and Ecotourism Advisor.

- In collaboration with Parks Management and GIS Advisors assess the institutional strengthening needs of ANGAP and make recommendations for inclusion in the annual work plan.
- Prepare annual work plans and targets for providing support to ANGAP to accomplish their objectives and mandates, including a task oriented time line for implementation. Review and update the time line as needed twice yearly.
- Prepare and submit quarterly narrative project reports to TR&D home office and USAID/Madagascar which identify the purpose of outputs of the institutional strengthening element of the SAVEM Project, the progress toward achieving these purposes and output, any problems which are being encountered, and the results of any testable hypotheses on the most appropriate strategies for protected areas management.
- Semi-annually, prepare three summary reports for USAID NRO on activities of the previous six months issues from that period, and time line of activities for the next six months.
- In coordination with ANGAP and the other long term technical advisors, identify the need for short-term technical assistance to assist ANGAP to fulfill its mandate.
- Oversee timely develop of scopes of work, recruitment and scheduling of STTA and eventual implementation of their recommendations, when appropriate.

- Develop an annual review of SOWs for prompt delivery to the home office, and maintaining an updated list of upcoming STTA with the Gainesville home office.
- Establish, evaluate and strengthen procedures to assure effective communication and coordination of activities between ANGAP and other policy and monitoring bodies created under the Environmental Action Plan.
- Assist in setting up collaborative working relationships with ONE, ANAE, DEF, and COMODE.
- Supervise set-up and maintenance of adequate administrative financial, contracts and procurement project procedures according to the TR&D policy.
- Build and maintain an effective working relationship with the GIS advisor, the Parks Operations Advisor, the USAID NR staff, the General Director of ANGAP, USAID, ONE, field operators and representative from government ministries, as appropriate.
- Assist in the identification and planning of seminars and workshops and the development of ANGAP's annual training plan to be supported under the institutional contract.
- Support ANGAP in its development of an effective communications system with NGOs active in the field of biodiversity conservation and related development activities.
- Represent the project at international meetings as approved by TR&D and USAID.

All TR&D technical advisors will be involved in USAID re-engineering activities, and will be core members of results packages most related to their technical expertise.

7.7. Annex 6: Important SAVEM TR&D Project Implementation Issues

SAVEM/TR&D Outstanding Project Issues/Problems	Actions taken during the semester (April - September 1995)	Actions to be taken in 1996
<p>1. Sustainability issue of ANGAP and management of protected areas. This issue was addressed in the PP supplement and options are being explored. More attention needs to be given to this issue by ANGAP, TR&D, and the operators.</p> <p>What is the optimal legal status of ANGAP as it evolves as the national parks service of Madagascar?</p>	<p>Issues of ANGAP legal status addressed with South Africa and in country expertise; decision is that ANGAP's current legal status is very good, but needs to be strengthened by:</p> <p>(1) official recognition of ANGAP's mission statement by the National Parliament, and reconfirmation of ANGAP's institutional identity. This should be a condition precedent of PE-2 funding. ANGAP should not answer directly to the DEF, but rather to the National Parliament through a designated Minister,</p> <p>(2) ANGAP should be officially recognized as the sole authority for developing ecotourism within national parks and reserves,</p> <p>(3) ANGAP's board of directors should be strengthened by increasing the percentage of private sector and reducing public sector representation. ANGAP's board should have the authority to set policy, including setting park fees, etc., without recourse to a ministry article or decree,</p> <p>(4) Support for ANGAP trust fund with Mac Arthur Foundation moving ahead,</p> <p>(5) Isalo National Park feasibility study,</p> <p>(6) Five park managers spent between 8 and 12 weeks in South Africa working with park wardens on management plans and sustainability issues.</p>	<p>Studies for financial sustainability for Isalo and at least 2 other principal parks planned, including feasibility study for tourist lodging revenue sources as linked to park carrying capacities and projected tourist demand.</p> <p>Technical support from the South African National Parks Board in areas of park management and ecotourism development, with accent on Isalo (on-going).</p> <p>Recruitment of a park systems operations advisor, beginning in January 1996. Significant STTA support to ANGAP's Ecotourism and Marketing operational division.</p> <p>Amber Mountain, Ranomafana, Masoala, possibly Andasibe, to prepare financial feasibility studies, similar to Isalo, for gradual transfer to ANGAP in park operations during the coming year.</p> <p>Isalo National Park to receive USAID funding to evaluate ANGAP's ability to correctly handle USAID funds and to give ANGAP experience in managing this park - based on lessons learned to date from ICDP projects. The approach will still emphasize ICDPs but this will done in a different manner.</p>

128

Important SAVEM TR&D Project Implementation Issues (continued)

<p>2. Need to ensure more effective participation by peripheral zone populations in the Protected Areas Program to allow for increased Malagasy sense of ownership. This is linked to lack of strong local/national NGOs to work as significant partners for ANGAP/PADGs.</p>	<p>ANGAP participation in GMU led workshop, April 1995, on community participation in development orientated activities.</p> <p>Village based NRM consultancies initiated in 2nd Quarter of 1995, jointly SAVEM/KEPEM.</p> <p>ANGAP's long term vision clarified, including concept of partnerships with local/international NGOs and other institutions in development orientated activities in peripheral zones and regions of national parks and reserves. Parks will have a development coordinator as part of staff for such linkage.</p>	<p>ANGAP continues to have serious concerns on the park management side of the Andasibe ICDP and hopes to find resolution on this issue. Andasibe, which has the largest DEAP outstanding funds, has yet to initiate peripheral zone micro-projects with these funds. This is considered top priority by ANGAP for the establishment of partnerships with local communities there.</p> <p>Environmental education is considered a priority activity in this regard. WWF assistance is particularly sought.</p>
<p>3. Depreciation issue: Sustainability can not be expected if donors do not directly address the need to build into the program funding the means of setting aside funding for covering purchase of new equipment which has depreciated.</p>	<p>NEW</p>	<p>ANGAP will calculate the cost of the essential capital costs of operation (buildings, vehicles, computers, etc.) calculate depreciation which should already have been set aside and seek funding to cover this. All future programming will require financial feasibility studies which will require a depreciation line item as part of monthly and annual cost of operation. We propose these funds be put into line item in a trust fund or other investment account. Donors should monitor this very carefully (i.e., that money not be used for other things - a condition for funding).</p>
<p>4. Need to better define the concept of "peripheral zone" around the parks and reserves, and ANGAP's institutional role with this area (in terms of ecotourism development - hotels of private sector agencies, sharing of park, entrance fees, etc.)</p>	<p>Orgasys (local firm) completed a study on this issue after visiting a number of concerned parks. The proposals made are under review by ANGAP. Recommendations appear very difficult to actually implement. ANGAP's authority rests within the borders of the protected areas.</p>	<p>Assess the impact of forthcoming law on decentralization on this proposal.</p> <p>This is an on-going issue which ANGAP will continue to deal with, on a park by park basis, for the time being.</p>

129

<p>5. Need to grant ANGAP the right to set tourist visitor fees for protected areas, as well as tie value to a hard currency. Foreign exchange value of entrance fees has been cut in half by FMG float.</p>	<p>Orgasys completed a legal study on this issue which clarified that ANGAP has always legally had the right to set these park fees, based on the 1991 interministerial decree.</p> <p>When presented to ANGAP's board of directors, the director of DEF led in disagreeing with this legal advice, stating that only the DEF has the right to do this. This has left ANGAP at an impasse; fees are less than 30% their 1989 value, and ANGAP has no means of changing them as a "good manager" should.</p> <p>DEF's perceived authority over ANGAP must be greatly reduced if ANGAP is truly to manage a network of parks and reserves. This is why authority must come from the National Assembly directly.</p>	<p>USAID front office should raise this issue with government authorities at highest levels. This and similar issues should be subject for the National Assembly and should be included in condition precedent of PE-2 funding donors.</p>
<p>6. Need for policy changes in laws concerning national parks in Madagascar to permit zoning within a park for a "service zone" - where specific tourist related infrastructure can be built for the purpose of revenue generation of park sustainability. Note: IUCN guidelines permit this in national parks, and this practice is followed worldwide in such parks. Madagascar laws are more constraining and need to be changed to permit this.</p>	<p>NEW</p>	<p>USAID front office should raise this issue with government authorities at highest levels. This change should be a condition precedent for any PE-2 funding in parks and reserves. Without this, it is almost impossible to expect a financially sustainable national parks system to develop.</p>
<p>7. All GMU funded ICDP projects end at about the same time. At issue here is the (short) length of these projects, and the need to assure continuity.</p>	<p>Discussions have begun with Amber Mountain this period concerning transition of park management to ANGAP over the next year.</p>	<p>During this period, TR&D/GMU/ANGAP will be meeting with Ranomafana, Masoala, and Andasibe to develop transition plans. This will also need to be initiated with Zahamena and Andohahela as part of the 1996 annual work plan process.</p>

130

<p>8. ANGAP organizational restructuring. ANGAP has been moving into a role of managing a network of parks and reserves. A new organizational structure has been defined. However, ANGAP continues in its old mode of operations, and this is increasingly causing problems both internally and with operators wishing to move into a transitional mode with ANGAP.</p>	<p>NEW</p>	<p>TR&D technical advisors; USAID, PACT/GMU, must strongly encourage ANGAP to begin effective changes in organization and in functional relationships with field programs.</p> <p>USAID front office needs to be sure that ANGAP has put into place its new organization, with real delegation authority to the national parks and reserve managers - as part of PE 2 agreements.</p>
<p>9. ANGAP inter-departmental relationships, DIVB has refocused its principal objectives toward support of the parks management role of ANGAP. DIVB has helped create technical skills in information management in parks and reserves - but suffers from personnel within ANGAP of equal capability.</p>	<p>NEW</p>	<p>Need to recruit personnel within ANGAP who will be specifically designated for technical duties - not meetings and other tasks.</p> <p>Personnel in other ANGAP departments must learn how to integrate their fields into the information system and work as team members in accomplishing information management tasks.</p>
<p>10. M&E system not fully operational, concept of hypothesis testing still not well understood or applicable.</p>	<p>Continued support was given by ANGAP's DSEP and technical advisor, with PACT/GMU support, to field operators.</p> <p>Prepared for M&E Workshops in Antsirabe for October 1995</p> <p>Several operators (Masoala, Ranomafana, Andohahela, Zahamena) have begun to link specific field level M&E staff directly to ANGAP's DESP/DIVB departments. This has produced greatly improved technical results for monitoring and will help in the transition of ANGAP field management of the future.</p>	<p>M&E workshop, October 1996, which field level socio and ecological monitoring personnel will attend, as well as key operator decision making staff.</p> <p>STTA assistance provided in the field to M&E field units specifically in looking at the impact monitoring/hypothesis testing aspects of monitoring. 2-4 weeks per site will be provided - greatly increasing the support given.</p>

7.8 Annex 7: Results Package Tables with Activity, Task Leaders, and Timing

132

Strategic Objective # 3: Reduce Natural Resource Depletion in Target Areas

Results Package #1: Information Management: Support to the production and circulation of information and the evaluation of NRM impact

Result	Means	TR&D Support Activities	Indicator	1996 Quarterly Achievements	Key Task Leader(s)	Timeframe	Cost STTA & Training
Access to basic information to improve natural resource management	Information Acquisition on Natural Resources in Madagascar	Extend technical support at the request of non-SAVEM field operators for data collection & management (Andringitra, Zombitse, Ambohitantely, Baie de Baly, Manombo, etc.)	Requests received, then support/training given		JMD, RS	January - December	
		Train operator M&E staff for data collection & management	2 field training visits (each SAVEM ICDP)		JMD, RS, + local STTA Abel Ratovo	March - December	\$ 7,000
		Produce a quarterly catalogue on available GIS/ANGAP data	quarterly catalogue distrib		JMD	January-December	
		Pilot project to produce CD-ROM with geo-referenced data on 6 protected areas	CD Rom finished		JMD + STTA	June, July, August	\$5880
		Training for Modeling and development for CD-Rom production	Training completed		Da Vinci, Tana	June	\$ 2,000
		Elaborate a National Monograph on Madagascar biodiversity	Monograph completed		JMD	January - December	
		Produce a high quality tourist image map for Isalo	Completed map for sale		JMD + USGS	June - December	
		Purchase about 10 satellite images and derived products- Monitoring of vegetative data. (EOSAT & SPOT)	10 Images Acquired		JMD	May-September	\$40,000
		Acquired Digital Cartographic Products - 5 maps at 1:100,000 scale	5 digital maps acquired		JMD	May-September	\$10,000
		Acquire maps for all ANGAP protected areas	Base maps of all 6 SAVEM ICDPs available		JMD	May - September	\$10,000
		Technical support to produce management plans for park management	Trip reports to ICDPs; First version complet in 4 parks		RC + ICDPs	On-going	
		Provide technical support to ANGAP in designing research plan for the main protected areas	Research plan exists in 4 PAs		JMD + ICDPs	June, August, October	
		Assist in the establishment of procedures for identifying & evaluating various systems used to manage protected areas. Lessons learned study	Lessons learned study in 6 SAVEM ICDPs		RS with ICDPs	January- June 1997	
		Aerial Videography - for all SAVEM ICDP's for the impact monitoring studies of 1996	Videography for 6 SAVEM ICDPs complet.		JMD + RS	May - December	\$15,000
Decisions taken based on data/information objectives	Creation of Framework, Policy and Standards for Biodiversity Data Collection	Define priority areas for research at national level	Priority areas defined		JMD, RS	July, August, September	
		Establish of norms for the collection, management and transfer of data and information	Norms written & distributed		JMD	On-going	
		Biodiversity Data Design	Data Design		JMD with WCMC	May-June	\$8400

		complete			(5 wks)	
		Quality control of FTM digital data for Zombitse, Vohibasia, Andringitra, Andohahela, Isalo	FTM completes digitization + quality control		JMD	January-December
		Update technical specifications for digital data quality control assessment	Specifications Updated		JMD, with ICDPs	April-December
		Training workshop: Elaboration of standards for vegetation classification to be used by all field operators (collaboration with University/department of Agronomy)	Workshop completed		JMD, RS in collaboration with University of Tana Agronomy Department	May (other work- June, July, August)
		Supervision of the Integration of digitized FTM 1/500.000 topo map from USGS within GIS/ ANGAP	Integration file complete		JMD	May - June
	Development of appropriate political and judicial policy	National workshop on biodiversity research	Workshop		JMD with ANGAP	June
		Biodiversity Regional Convention	Convention		JMD with UNEP/Seychelles	August/September
		Annual International Biodiversity Convention	Convention		JMD with UNEP/Argentina	November
		Annual CITES meeting	CITES Meeting		JMD with CITES/Zimbabwe	October
Systematic monitoring and evaluation of NRM impact	Development of Socio-economic and ecological information network	Extension of DIVB computer network to others ANGAP departments	3 ANGAP departments using network		JMD	April-November
		Train DIVB staff in network maintenance;	Training completed		JMD (in USA)	August-September
		Integration of ANGAPs documentation unit to national (CIDST) and international (IBISCUS) networks STTA - Documentation Training [SOW=Documentation indexing - local STTA]	Indexing Integration Complete		JMD with CIDST local consultant	May - July
		Provide socio-economic & ecological & program information to users, including USAID's API indicators	API indicators provided to users		RS	January-December
		Participation in annual reviews & monitoring of ICDP activities COS meeting, etc.	COS completed		RS	February-March
		Review M&E indicators to respond to ANGAP's needs in 1996 and beyond.	Revised List of Indicators finalized at Antsiribe (10/96)		RS	January-October October, 1996
Better understanding, knowledge of the Madagascar's environmental situation	Development of ANGAP Institutional Capacity to Manage & Analyze Data	Develop DIVB capacity for analysis & information production./ Increase DIVB staff Local STTA to assist data input	1 DIVB person recruited		JMD + local STTA	January December
		Train ANGAP & operators staff in GIS/remote sensing. Photo-interpretation CFSIGE/ICDPs Basics in Remote Sensing SFSIGE/Tana	10 staff trained		JMD + CFSIGE local STTA	May April, August

180

		Design & implement data collection & analysis & the integration of SAVEM project level socio-economic & biological data into ANGAP's GIS system	ICDP M&E systems (6) integrated into ANGAP GIS		RS, JMD	March - December	
		Train ICDP staff in digitized data quality control (SAVEM ICDP)	10 staff trained		JMD + CFSIGE local STTA	June	\$ 4,000
		Train ICDP staff in relational data base management (SAVEM ICDP)	6 staff trained		JMD + CFSIGE local STTA	July	\$ 4,000
		Train in documentation data management for documentation unit	Documentation center inform. system operatn.		JMD with STTA (training) support of Gasmí	May-June	\$ 6,500
Systematic monitoring & evaluation of natural resource management & Access to basic information to improve natural resource management	Support of Parks, Reserves & ICDP M&E System Implementation	Geo-referenced aerial videography to monitor land uses changes in 6 protected areas and priority areas in peripheral zones	Videographic data for 6 parks acquired		JMD,RS STTA	June, August, October	\$ 13,440 \$ 6,000
		Progressive transfer of M&E activities from ANGAP's DSEP department to DIVB	DIVB coordinates M&E system		RS, JMD	January - August	
		Restructure DIVB in order to incorporate the new socio-economic and ecological monitoring activities	DIVB restructured		RS, JMD	January - August	
		Annual M&E ICDP workshop in October, 1996	M&E Workshop held		RS	October	\$ 6,000
		More direct technical support to socio-economic & ecological monitoring staff of SAVEM ICDP's and the DIVB	8 Field Visits to SAVEM ICDP's		RS	April - November	
		Analysis of SAVEM project case studies of socio-economic impact an hypothesis testing: Studies on Lessons Learned in SAVEM ICDP's	Impact Case Study Lessons Learned Study		RS STTA	April - November	 \$13,400
		Analysis of spatial data on priority parks: Ranomafana, Isalo, Ankarana, Andasibe	Analysis maps complete		JMD, RS	April - October	

Strategic Objective #3: Reduce Natural Resource Depletion in Target Areas
Result Package #2: Financial Sustainability

Result	Means	TR&D Support Activities	Indicator	1996 Quarterly Achievements	Key Task Leader(s)	Timeframe	Cost
Foundation and Trust Fund	<p>Better Management of Funds already in existence such as park entrance fees, sales of products and services, research and filming fees, etc.</p> <p>Review potential for generating new funds within Madagascar.</p> <p>Initiate review of international fund raising process.</p> <p>Seek funds</p>	Trust Fund & Tany Meva Foundation assistance STTA (6 Weeks - 2-3 visits)	MacArthur Foundation support initiated - funding received		Pauline Wynter + STTA	March- December (periodic visits)	\$8,400
			ANGAP account in Tany Meva opened				
		Study tour to Indonesia (observe TF in action)	Evaluation of potential for fund raising in Madag. compl.				
		Study tour to France (observe TF in action)	Trip reports & recommendat.				
		Develop business plan for priority parks - including depreciation \$ invest. STTA	Business Plan for DRHC		RS RS STTA	TBD TBD TBD	\$ 7,000 \$ 6,000 \$5,000
					RC	TBD	\$ 3,360
Monitoring for Sustainability	Support to parks and reserves in preparing financial income/expense statements	Support ICDP DAFs in preparing parks sustainability M&E worksheet which will be used to determine the income/expenses of various parks of network to estimate financial needs for program sustainability. Priority: 6 SAVEM ICDPs plus Isalo	worksheets completed for 6 SAVEM ICDPs + Isalo		RS, DAF, and ICDP DAF's	January- December	
	Support in software training at the central office level in DACEASY for the ANGAP ecoshop - using point of sales software	ANGAP central office Training	ANGAP shop point of sales operational		RS, Benjamin	January-July	
	Support to ANGAP DAF in DACEASY & PLATINUM software	Platinum Training (2wks STTA) Support in use of Platinum Accounting	Platinum operational for ANGAP/DAF		RS	May	\$ 3,360
	Support to the Isalo National Park installing DACEASY as their accounting system	On site training	Isalo using DACEASY; ANGAP DAF importing data		Benjamin	April - December	
	Support to strengthen the DAF financial section through training program	Tana central office; support to ICDP DAF operators, as needed	Training report		Accounting firm in Tana	May-October	\$ 4,000

136

Strategic Objective #3: Reduce Natural Resource Depletion in Target Areas
Result Package #5: Park Management and Biodiversity Conservation

Result	Means	TR&D Support Activities	Indicator	1996 Quarterly Achievements	Key Task Leader(s)	Timeframe	Cost
The development of an efficient, effective and highly respected national parks institution	ANGAP Internal Organization and Functioning	Weekly ANGAP senior staff meetings, strategic retreats, joint field trips, special meetings, one-on-one discussions, etc. Specifically on:	Formal Meeting Reports		RS, RC, JMD	On-going	\$5,000 \$5,000 \$2,000 \$6,000
		Support the change of personnel management from DRHC to DAF	DAF Managing		RS with DAF	January - June	
		Support for the change of socio-economic and ecological monitoring from DSEP to DIVB	DIVB Monitoring		RS, JMD, with concerned ANGAP directors	January - June	
		Support for moving park entrance fee management form DAF to Department of Ecotourism	DRHC Managing DEAP		RS with DG & DRHC	January - June	
		Support to the Director General and senior staff in determining new roles and responsibilities of all staff, at different levels, particularly in what is delegated to lower levels	Clarified Lines of Authority		RS, JMD, RC with DG and ANGAP directors	January - December	
		Support to the new operational Department of Park Operations & Management in moving from the old DSEP task manager model to one of support to a network of park managers	DPOM has become functional		RC, RS, DG, Director DSEP	January - December	
		Support to the new operational Department of Ecotourism and Marketing in moving from the old DRHC division to focusing on international marketing and publicity.	DEM has become functional		RC, RS, DG, Director DRHC	January - December	
		Support to changing Park Entrance Fees (DEF to ANGAP authority)	ANGAP has updated park entrance fees		RS with DG, Director DRHC	January - June	
Support to the Director General in plans for ANGAP's own Park Headquarters in Tana	New Building under construction		RS with DG	January - May			

137

		Isalo senior personnel study trip to S. Africa	Trip Report		RC	TBD	\$15,000
	Developing Park Management Systems	Assigning authority and accounting together with delegating responsibility and decision making to all the various levels of the organization.	ANGAP procedures document		ANGAP with TA support		
		Establish an internal communication system that closes the potential communication gap (upwards and downwards) between ANGAP head office and the parks and between the various parks countrywide	system proposed and adopted		ANGAP with RC + local STTA		
		Review the present administration and financial systems	Report with recommendat.		RC		
Park Operations & Management Planning; Ecotourism, Marketing & Public Relations Planning (Priority Park of Isalo, Ranomafana, Andasibe, Ankarana	Support and guidance of ICDP M&E field staff in implementing monitoring and base line information system. When ICDP unable to furnish information, DIVB will take leadership in implementation.	All baseline acquired for monitoring and planning needs (data inventory accumulated over the years from ad hoc research surveys, serial photography, Landsat images acquired for appropriate periods.	Baseline data established		ICDP's with JMD and DIVB	On-going	
		Park boundaries clearly defined, peripheral zones defined	Completed for 6 SAVEM ICDPs		ICDP's with JMD and DIVB	On-going	
		Park zonation with particular emphasis on peripheral zones, buffer zones and service zones	4 Priority Parks completed		ICDPs with JMD, RC, RS, with DSEP	On-going	
		Layout plans for tourism facilities and management infrastructure in service zones in 4 priority parks	Tourism Plans for 1 SZ in 4 Priority Parks completed.		ICDPs with RC & DRHC 2- STTA	January - March	\$16,800 \$4,704
		An ecotourism master plan (short term and long term) including trails, roads, campsites, interpretation centers, entrance gates, ecolodge sites, bush camps, etc., which are related to estimated visitor carrying capacity in 4 priority parks	Master Plan in Place for 4 Priority Parks		ICDP's with RC + DRHC		\$4,704 \$6,720 \$1,680
			Policy study complete		3 STTA		
		Neighboring community policy- new ANGAP policy for PE-2	Policy adopted		ICDP's with ANGAP, RS	On-going	
		Develop business plan relating income and expenditure to the achievement of set objectives (STTA)	DRHC business plan exists		DHRC with TA advice from RC + STTA	2,3 quarter	\$3,360
		Write manual laying out procedures for ongoing park management and	Manual drafted		DSEP with RC support, +	June - June 1997	

	maintenance tasks			ICDP		
	South African National Parks Board Support	Quarterly Reports: recommendat.		RC	May - December	\$8000
Support to Park Managers of 4 priority parks	Planning, leading, organizing and controlling park operations: Budgets Annual Work Plans Maintenance of infrastructure Research and monitoring Visitor control, Train Design/Maint. Ecotourism facility development (eg trails and campsites) Fire control Law enforcement	Completed park management plans for 4 priority parks		RC, RS Benjamin STTA	March - June 1997 (on-going) transition between ICDP control + ANGAP management	\$2000
Transition from ICDP to ANGAP management	Advice, assistance and perhaps mediation inputs will be given to ANGAP	Recommendations given		RC, RS, JMD	on-going	
Interpretation Centers	Support in siting studies, architectural internal and external design of interpretation centers for Isalo, Ranomafana MSAADA drafting of Isalo, Ranomafana, detailed specifications for bid, construction supervision	Documentat. prepared for WB supported bids and contracts		RC + RS + Msaada firm	January - May	\$13,000 \$5,000
	Support with geo-referenced data for preparing legal documents for gaining title to the land on which these centers will be build along the border on these parks (service zone). Support with efforts to begin preparing for the displays, story-lines, etc, to place into these centers once they are built. They are to be completely built by the end of 1996 Support to the personnel who will be working in these interpretation centers. These centers will also be the location of the park offices, park entrance fee counter, a small store. Interpretation Center Seminar in Ranomafana	Map products Ranomafana, Isalo plans made for centers. Training sessions (6 people) in priority parks Seminar report		JMD RC with Lyn Robinson, + DRHC	January - May	\$3000
Ecotourism and Marketing in Madagascar's four Priority Parks	Support in developing a thorough understanding of the ecotourism market both domestic and international	Recommend. for targeting marketing		STTA Odendaal 2-8 weeks STTA (9		\$ 4,704 \$ 6,720

		pricing study		weeks) STTA IWK		\$ 1,680
		planning for appropriate infrastructure development for the parks	Recommend. for Pricing Plan for priority parks infrastructure Model	STTA Collinson (10 weeks)		\$ 16,800
		developing an appropriate framework to foster private sector involvement in ecotourism	contracts for ANGAP/PS partnerships	STTA 2-8 weeks Davies		\$ 4,704
		developing marketing and park products	New products developed	STTA 2 weeks		\$ 3360
		Assessment of local crafts and product quality improvements	Recommend. & Plan to do.	STTA - 4 weeks		\$ 6720
	Strategic Marketing and Business Planning	Identification of target markets (marketing) Management/Marketing Workshop Identification of potential tourism circuits and packages (marketing study)	Workshop proceedings Tourist circuits being communicate Master Plan for parks created	Parks Board STTA (Cf above)		\$15,000
		Identification of the balance of tourism facilities and services to be provided in and around the 4 priority parks	Partnership Plan	RC + STTA (include above)		
		Identification of key travel media, travel agents and travel operators in relation to these markets for the four priority National Parks		RC with STTA (icl. above)		
	Public Relations Strategy	Workshop on PR with the objective of gaining a local, national, and international PR plan	Training report			
		Identify strategies and mechanisms for communicating a constantly positive message about ANGAP to each of the key stakeholders	Strategy report	RC with DRHC + STTA		\$6,000

Strategic Objective #3: Reduce Natural Resource Depletion in Target Areas
Result Package #6: Sustainable Management of Forest Ecosystems

Result	Means	TR&D Support Activities	Indicator	1996 Quarterly Achievements	Key Task Leader(s)	Timeframe	Cost
Institutional support	Institutional strengthening of community forest management, especially in relation to the 9 category A protected areas; ZOC/ZUC ANGAP and community management	Park-Community Management of selected ZOC/ZUC in Isalo	Process Initiated: Quarterly Reports		RS	April - December & beyond	
		STTA: Community Management of Natural Resources in Ankarana Special Reserve buffer zone ZOCs and/or ZUCs	Process Initiated: Quarterly Reports		Marlo Gauthier	April, May and June 1996 (\$ 13,440)	
	Neighboring Communities Policy	Support to SAVEM ICDPs in: Sharing of entry fees Controlled utilizing of resources within park buffer zones (ZUC,ZOC) Restrictions in buffer zones Facilitating community involvement in ecotourim opportunities including crafts	Quarterly Reports & Consultant reports. Recommend. given on how to proceed.		RS, DSEP with SAVEM ICDPs & Isalo	On-going	\$6,720

14