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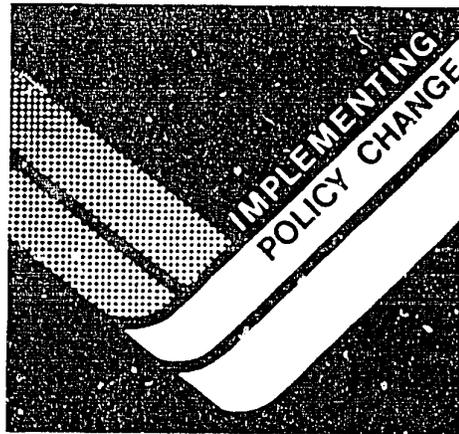
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# MADAGASCAR'S ENVIRONMENTAL ACTION PLAN: A Policy Implementation Perspective

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# **Madagascar's Environmental Action Plan: A Policy Implementation Perspective**

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## **Implementing Policy Change Project**

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\* At the time of the fieldwork for this study, Derick Brinkerhoff and Gwen Thomas were with the University of Maryland's International Development Management Center (IDMC). On June 30, 1993, the University closed IDMC.

## List of Acronyms

ADB	African Development Bank
ANAE	National Association for Environmental Actions
ANGAP	National Association for the Management of Protected Areas
CNRE	National Center for Environmental Research
CNRO	National Center for Oceanographic Research
COMODE	Malagasy Council of NGOs for Development and Environment
COS	Steering Committee
CS	Scientific Committee
CTP	Permanent Technical Committee
DEF	Department of Water and Forests
DDRA	National Office for Lands and Agrarian Reform
EAP	Environmental Action Plan
EEC	European Economic Community
EP-1	Environmental Program, Phase 1
FAC	Fund for Assistance and Cooperation (France)
FOFIFA	National Research Center for Rural Development
FTM	National Cartographic Institute
GMU	Grants Management Unit
GOM	Government of Madagascar
ICDP	Integrated Conservation and Development Project
IDA	International Development Association (World Bank)
IUCN	International Union for the Conservation of Nature
KEPEM	Knowledge and Effective Policies for Environmental Management
KFW	Financing Agency for Cooperation (Germany)
MARD	Ministry of State for Agriculture and Rural Development
MDS	Multi-donor Secretariat
MECIE	Environmental Impact Assessment of Investments
MEP	Ministry of Economy and Plan
NEAP	National Environmental Action Plan
NGO	Non-governmental Organization
NORAD	Norwegian Development Assistance Agency
NPE	National Policy on the Environment
ONE	National Office for the Environment
PM	Prime Minister
NCS	National Conservation Strategy
NRM	Natural Resources Management
SAVEM	Sustainable Approaches to Viable Environmental Management
TFAP	Tropical Forestry Action Plan
UNDP	United Nations Development Program
USAID	United States Agency for International Development
WWF	World Wildlife Fund

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## **Madagascar's Environmental Action Plan: A Policy Implementation Perspective**

### **I. INTRODUCTION**

This study is part of an ongoing stream of inquiry into the organizational and management issues involved in natural resources management (NRM) policy implementation in Africa. It derives its particular focus on these issues from an earlier investigation, based on A.I.D. documents and the NRM literature (Brinkerhoff, Gage, and Yeager 1992). The present study is one of several field analyses that seek to validate and refine the findings and conclusions of the 1992 desk study. The common thread running through all the field studies is an analytic filter that looks at NRM policies in Africa in terms of a set of conditions associated with successful policy implementation.

#### **A. Scope and Methodology of the Study**

The purpose of the study is to analyze the management dimensions of the policy reforms included in the National Environmental Action Plan (NEAP) in Madagascar, and to clarify which implementation issues are the most critical to progress with the NEAP and how Madagascar has addressed those issues. The study examines the extent to which Madagascar's experience with NEAP implementation fulfills six conditions associated with successful policy implementation. The analysis looks in particular at how Madagascar has dealt with interorganizational coordination and allocation of roles and responsibilities among the various implementing agents involved in the NEAP. The study assesses the prospects for successful natural resources policy reform resulting from the NEAP efforts currently underway in Madagascar, recommends potential management strategies and actions that could increase the chances of successful NEAP implementation, and offers some general lessons learned.

The study used a rapid appraisal methodology that combined interviews, site visits, and document review. Field activities took place between April 6-27, 1993. In-country, Dr. P  p   Andrianomanana, professor of economics at the University of Antananarivo, joined the team. During that period the team conducted interviews with Malagasy government personnel, USAID staff and contractors, national and international NGOs, representatives and technical assistance personnel from other donor agencies, and private sector operators (see Annex B for a list of persons contacted). Outside of Antananarivo, the team visited a protected reserve in Andasib  .

Prior to the team's departure from Madagascar, preliminary findings were shared with the staff of the Office National de l'Environnement (ONE) through a presentation and discussion meeting. Similar debriefings were held with USAID/Antananarivo and AID/Washington. The case study was written after these meetings. A first draft was sent to AID/ARTS/FARA,

## **B. Defining Policy and Policy Implementation**

The study uses the broader definitions of policy and policy implementation for NRM that guided the document and literature review (Brinkerhoff, Gage, and Yeager 1992). Public policy is defined as government decisions to use its resources to intervene in the behavior of (some) citizens to change that behavior in a desired direction. These decisions are formally embodied in laws, legal statutes, executive orders, and so on. In the Madagascar case, the basic enabling legislation for the broad environmental policy objectives of the NEAP is contained in the "Charte de l'Environnement Malagasy," or Environmental Charter (Law No. 90-033). This provides the legal point of departure for the NEAP (GOM 1990).

Policy implementation is defined as the process that runs from the passage of the basic statute, through the decisions and outcomes of designated implementing entities, to the compliance of target groups with the policy objectives. Policy implementation covers the operationalization of policy prescriptions into goals and actions that specify the agents, procedures, capacities, and behaviors required to produce the intended outputs at various levels (national to local). In keeping with this perspective on policy implementation, the focus of the study is on the analysis of the various factors that influence the achievement of stated policy objectives throughout this process.

## **C. A Model of Policy Implementation**

The study's analytic framework uses a model that sees policy implementation outcomes as a function of three categories of variables: the problem the policy is intended to solve, the way implementation is structured and managed, and the sociopolitical and economic setting in which implementation takes place (Mazmanian and Sabatier 1989: 18-48). These variables are reflected in six conditions empirical research has shown to be associated with successful implementation:

1. The policy and its statute(s) contain clear and consistent objectives, or some criteria for resolving goal conflicts.
2. The policy accurately identifies the principal factors and linkages leading to, and influencing, policy outcomes, including specification of target groups and incentives.
3. Policy implementation is structured to maximize the probability of compliance from implementing agents and target groups. This includes:
  - assignment of implementation responsibility to a capable and sympathetic agency,
  - integrated implementation structures with minimum veto points and adequate incentives for compliance,
  - supportive decision rules (e.g., appropriate authority and procedures),
  - adequate financial resources,
  - access to, and participation of, supporters.

4. Leaders and top managers possess substantial strategic management and political skills, and are committed to the policy objectives.
5. The policy receives ongoing support from constituency groups and key stakeholders within a neutral or supportive legal system.
6. Socioeconomic and political conditions remain sufficiently supportive and stable so that the policy is not undermined by changes in priorities, conflicts, and/or radical shifts in resource availability for implementation.

No policy in the real world enjoys an implementation experience where all six of these conditions are fully met, especially in the short-term. Policy implementation always faces a suboptimal scenario, where the challenge is to seek ways to increase the degree to which the conditions are achieved, while recognizing that success will remain partial and elusive. Because the effectiveness and ultimate impact of reform measures depend critically upon appropriate conditions and capacities for managing the implementation process, policy debates must extend beyond technical content to how reforms will be put in place and applied. Madagascar and increasing numbers of countries on the African continent are wrestling with this extended focus in their NEAPs. This study seeks to add analytic support to their efforts.

## **II. MADAGASCAR'S ENVIRONMENTAL ACTION PLAN**

Africa confronts an environmental crisis of growing proportions that jeopardizes the well-being and livelihoods of the majority of the continent's population in the near term, and holds the threat of disaster in the long term if NRM practices are not changed. Rampant deforestation, stagnant or declining agricultural productivity, soil degradation, disappearing biodiversity, and pollution problems in urban areas endanger the development potential of African nations, most of which are heavily dependent upon their natural resources base for survival. Environmental concerns are integral to almost all socio-economic development activities, and crosscut many of them. However, most African governments, and the international donor agencies that work with them, are organized sectorally. These structures compartmentalize development interventions in ways that make it difficult to build in environmental issues.

Assimilating environmental considerations into socio-economic development requires a new, cross-sectoral approach and innovative institutional arrangements. The recognition of this requirement by both African governments and donor agencies has led to a variety of integrated planning exercises: National Conservation Strategies (NCSs), Tropical Forestry Action Plans (TFAPs), and National Environmental Action Plans (NEAPs). Of these and other related approaches, the NEAP is the most comprehensive, and currently the most widespread. To date around 30 African countries have initiated NEAPs since the start of the process in 1987 (Talbot 1993, Falloux et al 1991). Across the continent, NEAPs represent the largest single set of attempts at integrating environmental planning and management activities in terms of funding levels, quantity and variety of participating agencies, and numbers of people (see World Bank 1990c, 1991).

Madagascar is a pioneer among African countries with NEAPs, having begun the process of analysis and planning in 1987, and moving to implementation in 1991. As a result of its early start, Madagascar offers the longest "track record" of experience with a NEAP, and an analysis of that experience offers a chance to reflect on the pluses and minuses of the NEAP process, leading to lessons both for Madagascar and other countries. This reflection begins below with a recounting of the story of Madagascar's EAP.

### **A. A Physical Environment Under Siege**

The world's fourth largest island, Madagascar faces increasingly serious environmental degradation. Exacerbated by poor economic performance over the past two decades, Madagascar's natural resource base is being destroyed at an alarming rate. An exploding population (estimated three percent annual growth rate) and unsustainable agricultural and livestock practices are reducing the ability of the natural resource base to provide sufficient development opportunities for its 12 million people. The country has made efforts to address environmental degradation problems, and Madagascar was one of the first African countries to take steps intended to reverse these trends. Recent political events, however, have slowed the pace of environmental reform, as the nation has been preoccupied with the transition to democracy and its accompanying uncertainties.

## **1. Madagascar's Faltering Economy**

Since the departure of the French colonialists in the early 1960s, Madagascar's economic performance has been mixed. The First and Second Republics, undergirded by socialist principles, aimed for economic self-sufficiency. The government imposed import restrictions and high tariffs, established price controls, nationalized industries, and invested heavily in the health and education sectors (Pryor 1990). A brief economic growth spurt in 1979-80 resulted from a massive investment program, financed by foreign borrowing and domestic money creation. Except for this period, Madagascar's gross domestic product has trailed population growth since 1971 (Dorosh 1990).

The late 70s investment policy, combined with worsening terms of trade for Madagascar's exports, led to a balance of payments crisis. The government signed stabilization agreements with the IMF in 1981 and 1982, which cut back on government spending and the rice subsidy. Structural adjustment programs began in the mid 1980s, with a major emphasis on trade liberalization and rice market reforms. Continued decline in the terms of trade, reduced public expenditure and private consumption, and slowed domestic production has intensified poverty over the past decade (Dorosh 1990). Per capita income is currently estimated at \$230 (USAID 1992).

As a result of the government's economic problems, investments to improve the productive capacities of rural residents are close to non-existent in much of the country. With the political spotlight on the capital city, Antananarivo, for well over 20 years, the economic well-being of rural Malagasy has suffered, with rapid deterioration over the past several years. Impassable roads, dilapidated irrigation systems, and low literacy rates have reduced agricultural productivity. The livelihood strategies of the rural poor represent one of the greatest dangers to the natural resource base. Poorer farmers push onto more and more marginal and erosion-prone lands, leading to shifting cultivation and uncontrolled forest exploitation, and severe soil erosion (see Verin 1992).

## **2. Pressures on the Resource Base**

Nearly 75 percent of the Malagasy population resides in rural areas, thus the importance of the natural resource base to sustainable economic growth is clear. The agriculture sector employs more than 85 percent of the population, provides 35 to 43 percent of GDP, and more than 80 percent of the country's foreign exchange (ADF 1992, World Bank 1990a). Traditional farming techniques, primarily slash and burn (known as "tavy"), have contributed to an estimated annual cost of environmental degradation of US \$200 million.<sup>1</sup> Due to annual clearing of old growth forests to plant crops, the poor quality soil once covered by indigenous forest cover is now exposed for cultivation. Each year farmers clear new land instead of rotating crops among previously cleared land. It is estimated that 80 percent of the country's original forest cover has been cut. Fuelwood consumption is another source of forest depredation, with estimates that more than 80 percent of energy consumed in the country is in the form of wood or charcoal (ADF 1992).

Livestock grazing also inflicts considerable stress on the land. Malagasy peasants consider ownership of a large herd of zebu cattle to be a sign of wealth and prestige, and it is estimated that there are eight million head of cattle in Madagascar. Livestock grazing has played a major role in the loss of forests, particularly in the west and south where cattle are most common. Annual burning of pasture lands to stimulate new growth for fodder also destroys soil quality and ultimately leads to a loss in soil fertility and erosion. "Each year 100,000 tons of arable land are lost and more than 10,000 hectares of rice fields silt up and go out of production" (Opsal and Talbott 1990: 16).

Other economic growth sectors, such as mining, also put pressure on the resource base. In many instances, mines are located in prime forests, which creates potential conflict between preservation of forested areas and mineral extraction. For example, a graphite mine located in Mantadia National Park has provided significant local employment at the same time that the adjacent Andasibé reserve generates considerable revenues from the ecotourism trade. This situation illustrates one of the development trade-offs facing Madagascar: exploit its natural resources for industrial export purposes, or preserve those resources for their tourism possibilities. Many have speculated that tourism, specifically ecotourism, represents a strong potential growth sector (see Peters 1992). USAID (1990a) estimates that the annual number of tourists visiting Madagascar will increase fivefold, from 40,000 in 1990 to 200,000 projected in the year 2000 (see also McQuillan 1988). Obviously the main attraction, the flora and fauna must be carefully managed in order to achieve these ecotourism targets. Future licensing of mining activities in the Andasibe park reserve needs to be evaluated in terms of the relative costs and benefits to the overall resource base and economy.

### **3. Madagascar's Unique Flora and Fauna**

The pressure on the island's natural resource base has an added dimension because Madagascar, by all accounts, is one of the ecologically richest countries in the world. With an extraordinarily high degree of ecological diversity, Madagascar is home to large numbers of indigenous flora and fauna. For example, 98 percent of palm species on the island are found only in Madagascar. Likewise, 93 percent of Madagascar's primates, approximately 80 percent of all the flowering plants, 65 percent of its birds, and 95 percent of the reptiles are endemic to the island (USAID n.d.). All of these species are dependent on a healthy ecosystem for their survival, and face risks of extinction. Land clearing, fires, cattle grazing, poaching, illegal and over exploitation of forests, erosion, and introduction of exotic species of plants and animals are the major threats to Madagascar's biodiversity. If current rates of deforestation continue, scientists estimate that Madagascar's biological diversity, as well as its ability to continue as an agrarian society, will be destroyed in 20 to 40 years (USAID 1990a).

Biodiversity is increasingly recognized as having direct links to socio-economic development, and Madagascar's unique contribution to the globe's complement of species makes biodiversity an important component of Madagascar's environmental strategy (see McNeely et al 1990). Madagascar's status as a species-rich mini-continent places the country in the spotlight of international groups concerned with the protection and conservation of flora and fauna worldwide. This fact has proven to be an important factor in Madagascar's EAP experience.

## **B. Origins of an Environmental Strategy**

Madagascar was among the first developing countries to recognize the need for an environmental strategy. The government's National Strategy for Conservation and Development, developed with the help of the International Union for the Conservation of Nature (IUCN) and presented to the national legislature in 1984, sought to increase Malagasy citizens' awareness of environmental concerns, change negative behavior towards the natural resource base, increase technical ability to combat environmental destructiveness, and improve capacity to encourage local participation. This strategy served as the launching pad for environmental awareness among the public and private sector, and helped to catalyze international donors and conservation groups (see Mercier 1990).

### **1. International Interest in Madagascar's Environmental Problems**

In 1985 at an international conference held in Madagascar on "Conservation for Development" the urgent need to reverse the island's rapid environmental degradation was highlighted. With opening comments by the World Wildlife Fund (WWF), and the participation of several international donors and international conservation groups, the stage was set for the international community to play an active role in Madagascar's conservation efforts. These international conservation groups were keenly aware of the value of Madagascar's biodiversity. Their initial objectives were to assure maintenance of a proper ecological balance and protection of important plant and animal species.

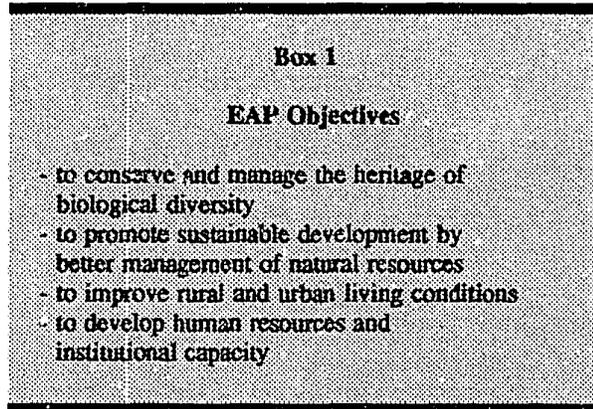
Following the 1985 conference, the Government of Madagascar (GOM) created an ad hoc interministerial committee and a small technical planning unit to continue work on the national conservation strategy. However, with few resources to support this effort and worsening economic performance, the majority of support for environmental efforts came from international non-governmental groups such as WWF, and U.S. universities including Duke University, North Carolina State University, Yale University, Washington University, and the Missouri Botanical Gardens. Working in Madagascar since the early 1970s, these universities have focused primarily on research and cataloguing of indigenous species. WWF established an operational presence in Madagascar in 1986 through a USAID-funded conservation project in Baza Mahafaly/Andohahela (see O'Conner 1990).

In the early stages of the environmental movement, it appeared that Malagasy government officials, scientists, and development agents would play a lead role in orchestrating the effort. Over the long run, however, the international conservation groups and donors became key players in promoting and encouraging continued action, working with a core group of Malagasy environmentalists. Due in large part to the resources they were able to commit to the effort, international donor agencies continued to play a major role as the GOM embarked on the environmental planning process.

During this same period, the World Bank was initiating participatory environmental planning processes in three other countries (Mauritius, Lesotho, and the Seychelles).<sup>2</sup> The World

Bank representative in Antananarivo at the time had a keen interest in protecting Madagascar's biodiversity, and took an active role in supporting the GOM in pursuing environmental planning efforts, modeled after the participatory approach the Bank was supporting elsewhere. With this support and encouragement, the GOM solicited the cooperation of the World Bank in early 1987 to develop an action-oriented environmental assessment.

The first World Bank environmental planning mission arrived in October 1987. While Mauritius, Lesotho, and the Seychelles started the environmental planning process earlier, Madagascar was the first country to emphasize the link between planning and action. In fact, it was the Malagasy who insisted that the environmental plan be action-oriented, hence the title, Environmental Action Plan (Falloux interview 1993). The EAP's objectives were broad, ambitious, and long-term (see Box 1). It would take a significant amount of analysis and planning to reach the level of operational targets; moving the EAP in that direction was the task of the next two years (see Mercier 1990).



International donors coordinated funding for the EAP effort. The consortium included approximately 10 donor agencies, both bilateral and multilateral. Each donor provided funding for various elements of the EAP and this funding was placed in an Environmental Fund. With considerable interest in Madagascar's EAP, the donors thought that a coordinating body would be needed to broker the different interests of the international community. Therefore, a Multi-Donor Secretariat (MDS) was established, based in Washington DC at the World Bank with USAID funding, in the late 1980s. The MDS was intended to provide special coordination and close supervision over Madagascar's EAP, and to disseminate information and findings to collaborating donors as well as to other countries embarking on a similar process.

## **2. Collaborative Analysis and Planning**

The World Bank-led team decided to use working groups to conduct their analyses (Falloux 1990). The EAP concept, as envisioned, would have top-level political commitment, a strong policy focus, significant local and regional participation and communication, a balance between studies and action, and would require active international support (Mercier 1990, Talbot 1990, Falloux and Talbot 1992). In recognition of the long-term nature of environmental changes, the EAP planners designated an extended 15-20 year timeframe for the action plan. The EAP was intended to be iterative to adjust to lessons learned and modify policies and approaches periodically.

With a wide range of possible areas of analysis, the key issues were selected at initial meetings with the GOM and the World Bank mission. While the initial lists were broad and

inclusive, due to budgetary constraints, certain areas were later dropped to focus on those items considered to be most critical (see Box 2). The working groups started their data collection in November 1987 and completed their analyses in early 1988 (Falloux 1990). Rather than narrowing the focus of the working groups, sub-working groups were set up, which further divided the topic areas. The products from the working groups were descriptive in nature and did not in general provide detailed proposals for action. In March 1988, the working group reports were completed and a World Bank mission returned to assist in synthesizing findings from the volumes of completed analysis.

The teams were composed of approximately 150 Malagasy government analysts, academics, and consultants and some 40 international environmental experts. The EAP planning process served to identify several individuals with expertise and interest in the environment, whose influence and importance continues to this day. In all cases, their participation in the process has continued over the past five years, albeit changing posts and job responsibilities.

The EAP successfully drew on host country expertise by including Malagasy professionals in the working groups. In addition, the process included a multimedia campaign to increase public awareness of environmental issues. During the first two years, however, participation was limited mainly to Antananarivo (Falloux et al 1991). In an effort to maintain the momentum of the analysis, input from politicians, government officials, and farmers outside of the capital was not solicited. Likewise, while international NGOs, such as WWF, worked closely with the EAP team members, local NGOs, most notably religious NGOs who play an active role in rural Madagascar, were not brought into the process in a notable way (see Opsal and Talbott 1990, Talbott 1990, Ramahatra 1991).

## Box 2

### Key EAP Issues

#### First Priority

- tools for environmental management
- erosion and control measures
- man-space relationship
- ecosystem value and diversity conservation
- improvement of urban environment and better interface with the rural areas
- energy-environment linkage

#### Second Priority

- environment and human health
- natural catastrophes
- marine environment

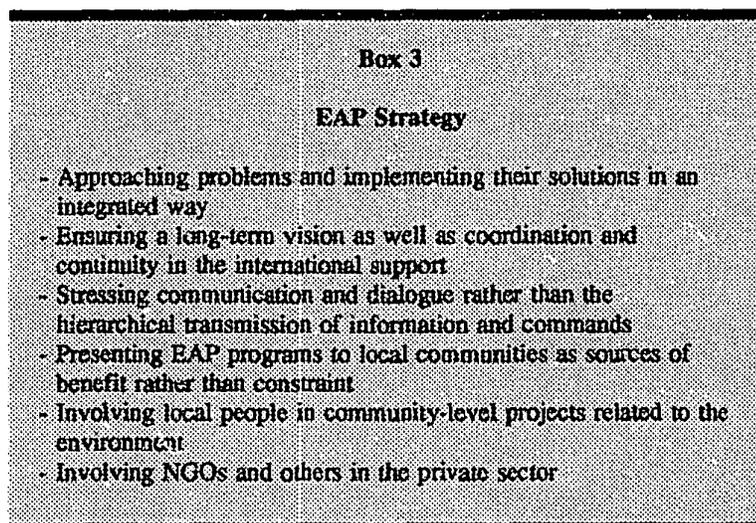
#### Final Priorities and Subsequent Working Group Themes

- erosion control, soil and water conservation
- ecosystems value and diversity conservation
- institutional framework and environmental policy
- urban environment protection, with special emphasis on Antananarivo plain
- tools for protecting, managing and monitoring the Malagasy environment
- programming the environmental research
- sensitization, education and training

### C. The Design of the Environmental Action Plan

The EAP final documents were presented at a conference in Paris in May 1988, and in November of the same year the national assembly approved the broad outlines of the EAP, setting the legal process in motion to formalize Madagascar's commitment to addressing its environmental and natural resource problems.

With the comprehensive analysis completed and the government's support to move ahead, two actions remained outstanding in order to implement the environmental action plan: formal legislation had to be drafted and approved by the national assembly, and the recommendations outlined in the EAP analysis needed to be transformed into an operational program. These two actions occurred simultaneously, as the development of the former provided input to the latter.



Based on the completed EAP analysis, a strategy and priorities were established, with the focus on process as well as content issues (Box 3). From November 1988 to March 1990, technical experts (sponsored by the World Bank) developed a 15-year lending program and then divided the plan into three manageable five-year phases (Box 4). The first phase of the World Bank (IDA) Environment Program (EP-1) focused on creating the institutional and legal framework to address issues over the 15-year period (World Bank 1990a).

#### 1. **The Legislative Base: The National Environmental Charter**

During the process of defining the EAP program, the foundation for environmental legislation was established. Later in the same year that the EP-1 credit agreement was signed (May 1990), the GOM national assembly adopted the National Charter for the Environment (Decree No. 90-033, passed in December 1990). The Charter articulated the importance of increasing public awareness of the problems of environmental degradation and stressed the link between conservation and economic development. Specifically, the Charter formalized the objectives, principles, and framework for what was termed the National Policy on the Environment (NPE). Apart from any donor funding in support of the EAP, the GOM's adoption of the Charter signified acceptance and ownership of the environmental action plan. The Charter explicitly stated that a general national policy on the environment is not sufficient; the government must define, in detail, the means of achieving the policy objectives. Building on the

conclusions of the EAP workgroups, sectoral and regional priorities were spelled out in the document. These include: education, training, and increasing public awareness; watershed management; land titling; protection and management of the country's biological diversity; development of ecological tourism; improvements in rural and urban quality of life; setting up tools for management, protection, and continuous monitoring of the environment; and setting up the institutional framework. The operational strategy for realizing the NPE stressed the need for research, involvement of the people whose lives are involved, and financial sustainability.

EP-1 was designed to strengthen the weak institutional framework that existed during the EAP analysis and planning stages. The National Commission on Conservation for Development and the Permanent Technical Committee (CTP), created in the mid-1980s, were only consultative bodies and lacked experience and resources to effectively tackle the issues. By the end of 1987, the GOM had established a support unit for the EAP (the CAPAE, or "Cellule d'Appui au Plan d'Action Environnementale"). Placed under the Ministry of Economy and Plan (MEP), the CAPAE was created to coordinate the work of the numerous ministries and donors involved in the preparations of the EAP, and to plan and undertake a number of studies and pilot projects for the environment. Staffed largely by consultants, this unit eventually assumed responsibility for working with donors to develop EP-1.

The Charter established an institutional framework for implementing the NPE, mandating the creation of several new national-level institutions for EAP oversight and coordination. Designated specifically in the text of the Charter were the following revised and new structures:

- **National Coordinating Committee for Development and Conservation Activities:** Chairman - Prime Minister. Composed of representatives from all of the ministries, as well as from the NGOs and nature and environmental research, action, and protection organizations.
- **Scientific Committee (CS):** Technical and scientific experts providing support to Interministerial Committee members. They would evaluate results, propose guidelines,

#### Box 4

##### EAP Program (15-20 year timeframe)

- Protecting and managing the national heritage of biodiversity, with special emphasis on parks, reserves, and gazetted forests. This effort will include the sustainable development of the surrounding areas.
- Improving the living conditions of the population. This will be done in rural areas by improving the protection and management of natural resources. Particular attention will be paid to watershed protection reforestation, and agroforestry. In urban areas, this will involve improving water supply and sanitation, waste management and pollution control in general.
- Promoting environmental education, training, and communication.
- Developing environmental research on terrestrial, coastal and marine ecosystems.
- Establishing mechanisms for managing and monitoring the environment.

and proposal the overall technical direction for the NPE. CS coordinates environmental research among the various institutes, both public and private, national and international.

- **National Environmental Bureau:** Executive arm of the Prime Minister's committee and the agency responsible for the EAP. This structure became the "Office National de l'Environnement" (ONE), which replaced the CAPAE. Several CAPAE consultants went on to fill full-time ONE positions.

For implementing the EAP, the Charter was less specific. At the level of managing EAP activities, it called for the intervention of a combination of sectoral ministries, research centers, NGOs and local community groups. At the level of field operations, the Charter specified that EAP activities would be carried out through contracts, for the most part awarded to local NGOs and community groups. As described below, several additional structures were set up for EAP implementation in the course of donor-funded project development under the EP-1 umbrella.

## 2. Translating the EAP into Action: Donor-Funded Initiatives

Madagascar's capacity to operationalize the EAP was (and remains) almost totally dependent upon international donor agency funding. The World Bank's EP-1 became the operational framework for the EAP. To start up the EAP, EP-1 tasks revolved primarily around coordination of activities, revitalizing existing organizations, or where needed, drafting new legislation and creating new institutional capacities. EP-1 was designed to ensure that the necessary institutional foundations would be in place to allow future phases to succeed.

EP-1 contained seven program elements. Following the established precedent of coordinated donor funding for the analytic phase of the EAP, donors made commitments to individual program elements, based on how each component fit with their ongoing country efforts. The following table provides a summary of this information.

**Table 1: EP-1 Components, Implementing Agencies, and Funding Sources**

Program Elements of EP-1		Implementing Agencies	Funding Source
(1)	Protection and management of biodiversity	DEF, ANGAP	USAID (SAVEM Project, Debt for Nature Swap); UNDP/UNESCO; NORAD; KFW; UNDP; WWF; and U.S. Universities
(2)	Soil conservation, agroforestry, reforestation and other rural development activities	ANAE	Coopération Suisse, ADB, and NORAD.
(3)	Mapping and progressive establishment of a geographic information system	FTM	FAC, IDA, and KFW
(4)	Establishment of clear boundaries for protected areas and improvement of tenure security through land titling in EP priority areas	DDRA	IDA, FAC, EEC
(5)	Environmental training, education, and awareness	ONE	ADB
(6)	Environmental research on land, coastal and marine ecosystems	CNRE, CNRO, FOFIFA	ADB, IDA, FAC, and NORAD
(7)	Support activities including institution building, establishing environmental assessment procedures, etc.	ONE	USAID (KEPEM), UNDP, IDA, FAC, and ADB

The original cost of EP-1 was estimated at US\$78.8 million (most recent estimates put the total program cost at \$85 million). Of this original budget, it was anticipated that 33 percent of funds would go to biodiversity protection, 15 percent for soil conservation and watershed mini-projects, 20 percent for mapping and geographic information systems, 11 percent for land titling, six percent for education and training, four percent for environmental research, and 11 percent for institutional support for policy formulation and procedures (World Bank 1990a: 27-28). With the highest percentage of resources being allocated to biodiversity and conservation (Component 1), some critics noted that EP-1 strongly reflected the interests of the international conservation community while less attention was given to issues of socio-economic development of the rural Malagasy or to urban/rural pollution. EP-1 designers and GOM officials responded that the EAP is a long-term effort and that other environmental areas would be developed in subsequent phases, and that if conservation efforts were not pursued now, no biodiversity would remain in the future to be protected.

#### **D. Implementing the Environmental Action Plan**

The EP-1 framework created a complex implementation network that was intended to be comprehensive and flexible. Under the best of circumstances, the framework would require exceptional political, managerial, and technical skills. Madagascar's situation was less than ideal, and coincidental with the start-up of EP-1, deteriorated markedly in the face of two years of political turmoil.

In 1991, the Malagasy took to the streets to protest worsening economic conditions and the autocratic rule of President Ratsiraka. A national strike was sustained for almost ten months during the summer and fall of 1991, and stretching into 1992. These general strikes, particularly effective in the transportation, banking and civil service sectors, virtually paralyzed the country and disrupted most economic and governmental activity until a transitional government was installed in late November 1992. Several opposition parties participated in the formal democratic elections held in November 1992, and by the January 1993 run-off election, the field was narrowed to three. The vote for the new republic was accompanied by political debates regarding a federalist system versus a constitutional state government. By the end of January 1993, with the election of President Zafy to succeed President Ratsiraka, this debate was resolved with the constitutionalists in the majority. The foundations for the Third Republic were in place. These events significantly affected implementation of the EAP (see Annex A).

While those who developed EP-1 could not have anticipated the subsequent political changes, they clearly recognized the interdependence among the seven EP-1 components. Efforts to implement the program would require strong coordination skills and institutions capable of addressing the technical, political, and administrative challenges that lay ahead. The program was designed to encourage an innovative and flexible institutional framework where the public and private sectors would work in tandem, interacting with a large array of foreign institutions (international and bilateral donors, universities, and NGOs) while providing efficient national coordination and increased national capacity.

##### **1. Blending Public and Private Sector Mechanisms**

Starting with the original environmental initiatives of the National Strategy for Conservation and Development in the mid-1980s, Madagascar had established several public sector entities to coordinate and oversee implementation of environmental strategies. The first public body formed to serve this function was an ad hoc interministerial commission charged with defining the next steps to implement the strategy. The "Comité Technique Permanent (CTP)" was then created as the environmental strategy secretariat, housed in the Office of the Directorate General of Planning. During the analytic phase of the EAP, the CAPAE served as the GOM's technical focal point.

With the official mandate of the Environmental Charter, the GOM passed the coordination and oversight function from the CAPAE to ONE for the EAP's implementation phase. The Charter states, "Essentially, its role will be to guide the [implementation] actions and to coordinate them in accordance with the guidelines of the Charter of the Malagasy Environment.

Moreover, it will control exact execution of operations in compliance with procedures, terms of reference, and objectives set out by contract" (GOM 1990).

For EAP implementation the GOM put in place several non-governmental mechanisms, as part of the conditionalities designed into the EP-1 credit package. These included:

- **National Association for the Management of Protected Areas (ANGAP):** A small semi-autonomous private agency whose mandate is to oversee and coordinate the management of selected park reserves and of integrated conservation and development projects (ICPDs) adjacent to those reserves. With representation from both the public and private sectors, ANGAP's Board of Directors oversees its activities.
- **National Association for Environmental Actions (ANAE):** A small, flexible non-governmental agency, ANAE is a legally recognized private foundation. ANAE members include national and international NGOs, religious groups, and representatives of private business and consultants. ANAE focuses on preparation and implementation of watershed protection, soil conservation, reforestation and other rural development activities.
- **Steering and Oversight Committee (COS):** Made up of all the major donors and key executing agencies and ministries, the COS meets each December to discuss policy, program progress, problems and future action including funding. ONE is responsible for coordinating COS annual meetings.

Each component of EP-1 required an implementation network that combined policy formulation and oversight by public sector entities, and implementation of field activities shared between public and private sector agencies. This new boundary between the state and the private sector required some significant rethinking on the part of the GOM, some of which was reflected in the Charter, where the text refers to the need to disengage the state progressively from sole responsibility for action. The leadership of Madagascar, like that of many African governments, retained the mindset that almost all socio-economic interventions were the prerogative of the state (see, for example, Rothchild and Chazan 1988). Despite some change in perspective, many officials remained entrenched in the old worldview. The creation of ANGAP, for example, was strongly resisted by the Ministry of Forestry and Water's Forestry Department (DEF), to the point of nearly derailing the signing of the loan agreement for EP-1.

The DEF-ANGAP relationship illustrates both the benefits and the difficulties in making public-private sector collaboration work. The impetus for ANGAP's creation emerged from the well-recognized failure of the DEF to fulfill effectively its role as the government agency charged with protecting and managing Madagascar's forest resources and its biodiversity. Under donor pressure, the DEF agreed to delegate the management of selected parks and reserves to field operators through ANGAP.<sup>3</sup> By virtue of receiving its mandate and authority through DEF, ANGAP fulfills certain public sector functions. However, its non-governmental status allows it a much larger degree of operational autonomy and performance capacity than a GOM public agency. For example, ANGAP can hire and fire without the need to follow GOM civil service regulations. This flexibility has given ANGAP: a) a high quality, motivated staff for its own

internal organization; and b) through its management contracts, additional staff to carry out NRM activities in the field. In addition to its role in overseeing park reserves, ANGAP has a Grants Management Unit (GMU) which provides funding to NGOs working with communities around the protected areas (see Gaylord et al 1993). A Biodiversity Planning Unit, currently being staffed, will assist in drawing up strategic plans for monitoring Madagascar's unique biodiversity.

However, considerable tension exists between the DEF and ANGAP for a number of reasons. From the DEF's perspective, ANGAP's very existence is an inherent criticism of its performance record. The resources available to ANGAP and its staff provoke jealousies among DEF employees. The DEF often cites insufficient pay and lack of transportation as the root cause of its inability to manage protected areas, to recruit qualified agents, and provide necessary policy guidance. With high levels of support and attention provided to ANGAP (particularly through USAID's SAVEM project), and dwindling GOM resources for DEF, the morale of DEF staff is quite low.

The DEF's willingness to delegate authority to ANGAP has been another source of tension (Gaylord et al 1993). The DEF has sought, relatively successfully, to retain an element of control over ANGAP and its field activities via personnel decisions. The DEF appoints national park directors, even in cases where ANGAP has contracted out the management functions to field operators. The majority of senior ANGAP staff were seconded from DEF. While all employees have putatively left the payroll of DEF, their professional loyalties may result in an overly cautious approach to problem solving so as not to harm future reintegration into the DEF once ANGAP's funding terminates. While by all accounts ANGAP has performed well in a difficult setting, the problems with the DEF relationship notwithstanding. However, these linkages to the DEF have, according to some observers, hindered ANGAP's ability to do even better.

Public-private collaboration in EAP implementation has worked somewhat less contentiously in the case of ANAE, in some degree because ANAE has been able to operate relatively autonomously. In support of EP-1's Component 2, ANAE implements small watershed/soil conservation projects through a network of field operators, both public and private. ANAE's mandate derives from the Charter, it has a nominal attachment to the agriculture ministry, and its financing comes from donor agencies (see Table 1). Working closely with local community groups and NGOs, ANAE has focused the majority of its miniprojects to date on the Antananarivo plateau. Some donors feel that ANAE should redirect its efforts to national park peripheral zones. By supporting community projects in the buffer zones adjacent to these parks, the overall impact of EAP would be enhanced, according to World Bank sources. ANAE staff consider that their relationships with local groups, where the point of departure for a project is community felt needs, would be negatively affected if they were to advocate projects in a given village simply because it was located near a protected area.<sup>4</sup>

A set of relatively discrete technical activities under EP-1 (Components 3, 4, and 6) were assigned to several specialized public sector agencies. Mapping and progressive establishment of a geographic information system is conducted by two public sector institutions, the National Cartographic Institute (FTM) and the National Office for Lands and Agrarian Reform (DDRA).

FTM implements all activities involving mapping, remote sensing, and geographic information systems. Charting and inventorying the natural resources and biological assets of the island, FTM is attached to the Ministry of Public Works. Once the premier mapping agency of Africa, its data base has fallen behind after decades of neglect. It is now the subject of a World Bank-French joint initiative to rebuild its professional capacity and to undertake a major cartographic update.

DDRA's role in the EAP is to clarify boundaries for protected areas and improve land security through titling in the EP-1 priority areas. DDRA staff conduct cadastral surveys and pilot land titling. Attached to the Ministry of Agriculture, DDRA receives World Bank, French and EEC funding to conduct a national cadaster. Its responsibilities for the land registry and transfer process also involved it in discussions on land reform, revised tenure law, and problems associated with use-rights in the vast open access areas in the public domain. Three public sector research units also play a role in the implementation of EP-1. FOFIFA (National Research Center for Rural Development) for soil conservation and natural forest management; the Center for Oceanographic Research (CNRO) for coastal and marine research; and the National Center for Environmental Research (CNRE) for other land based research not covered by FOFIFA.

The Charter and EP-1 laid out an important role for the private sector in EAP implementation at the field level. Both NGOs and for-profit firms are involved, although the bulk of EAP field activities have been undertaken through NGOs (see Christopherson et al n.d.). Here the linkage between the implementing agents is a contractual one. ANGAP awards contracts to manage national parks, and ANAE works with NGOs and local communities to carry out soil conservation and development initiatives. A separate USAID-funded project has supported building new linkages among NGOs themselves to help strengthen their implementation capacity. An umbrella group of 34 urban and rural NGOs involved in developmental and environmental activities was formed, called the "Conseil Malgache des Organisations Non-Gouvernementales pour le Développement et l'Environnement (COMODE)." COMODE provides a mechanism for coordinating action, exchanging information, conducting group activities among NGOs, represents its members in a unified front on issues of common concern, and provides training services in project design, proposal writing and other services to its members (Brandstetter and Karch 1992). This support could position COMODE members to play more of a role in the EAP in the future; to date they have had little involvement in EAP implementation. All of these private sector groups offer the potential to bring the EAP closer to larger numbers of resource users in the rural areas, at the same time as promoting the development of the NGO sector as an important intermediary between the public and private sectors (see Carroll 1992).

Another, more limited use of the private sector has been to supplement analytic capacity of EAP implementing agencies in areas where they are technically weak. For example, ONE, with a relatively small staff, does not have the in-house capacity to conduct in-depth analyses in all topics relevant to the EAP. In these cases, it contracts out specific studies to gain information on policies and procedures. To date, ONE has worked with over three Malagasy firms to conduct management/training assessments, environmental evaluation procedures, and strategic planning exercises.

## 2. Searching for Effective Coordination

The World Bank's EP-1 designers realized that this was a high risk program due to the coordination responsibilities:

It is the first coherent effort in Madagascar to tackle environmental problems and inevitably starts with a number of unknowns - institutional, technical, sociological. There are several new institutions to be established, new legislation has to be passed, staff with rare skills have to be found, and - most importantly - the hearts and minds of people have to be reached. The program has been conceived on positive assumptions, but with safeguards built-in. The implementation strategy provides for a flexible institutional framework, balancing responsible initiative with coordination; a progressive implementation rhythm punctuated by periodic review, good feedback for monitoring and evaluation; and a supportive policy environment ... Perhaps the greatest risk is that the range, complexity, and interdependence of the actions will make effective management difficult (World Bank 1990a: 54).

EP-1 sought to deal with achieving a balance between operational autonomy and coordinated action through several mechanisms. One way was the use of contracts between central units (ANGAP and ANAE) and field operators. The intent was that the interagency relationships established through the contracts would provide for: a) periodic review at the contract letting and award stage to assure compatibility with program objectives, b) feedback on progress at specified mid-contract monitoring points, and c) evaluation at the end of the contract life so as to make adjustments in the program. In addition, the contracting mechanism would have the safeguard of accountability for performance, with specification of deliverables and a limited timeframe.

In practice, this coordination mechanism met with some difficulties, due in large part to differences in perceptions of appropriate levels of contractor oversight by ANGAP and ANAE (see Gaylord et al 1993). In the case of ANGAP, field operators felt that staff used the espoused need for coordination as an excuse for inappropriate interference in the internal management of their operations, thus limiting autonomy and flexibility, the supposed benefits of using contracts in the first place. ANGAP leadership countered that a "firm hand" was justified because of contractor management weaknesses and the danger that EP-1 activities could stray off-track. These conflicting points of view have yet to be resolved (see Section IV for further discussion).

Another means EP-1 used to achieve coordination was to create interlocking and overlapping linkages through various interagency committees and boards of directors. The EAP structure contains three interagency committees: the interministerial coordinating committee for the NPE, the scientific committee (CS) and the COS, which brings in the international donors. In addition, ONE, ANGAP, and ANAE have administrative oversight committees or boards of directors. For example, ONE was designed to have a seat on the boards of ANGAP and ANAE, and to participate in the review of the annual workplans of FTM, CNRE, CNRO, and DDRA. Further, each of ANGAP's ICDPs and ANAE's miniprojects has a project steering committee.

Several problems arose with this linkage structure. First was the sheer time and effort consumed in attending all the meetings. Many EAP implementing agency staff were members of several of these committees and boards. Those made up of ministers rarely if ever met because of the conflicting demands on senior GOM officials' time and the difficulty in getting them in the same place at the same time. Ministers unable to attend sent representatives, but their stand-ins were not empowered to make any decisions. Often, ministers would send a different person each time, thus continuity of membership was impossible. At the technician level, a similar situation held. Either staff sent last minute stand-ins, or attempted to attend personally as many meetings as possible, with the result being that they were chronically ill-prepared.

Second, because attendees were either representing someone for whom they were not authorized to speak, were first-time attendees, and/or were under-informed, meetings of these lynchpin structures rarely led to the resolution of any issues or to any decisions that facilitated problem-solving. Rather, they tended to breed confusion, frustration, and conflicts whose aftermath negatively affected the day-to-day interactions among EAP implementing partners.

Third, the absence of a clear understanding of each actor's role in EAP coordination contributed to people working at crosspurposes, in many cases seeking to advance their individual agency interests at the expense of progress with the EAP. Compounding this dynamic is the Malagasy understanding of the concept of coordination itself. Based on the linguistic meaning of the word in French and reinforced by their experience in the GOM French-inspired administrative system, coordination means hierarchical control. Thus if one implementing agency coordinated its activities with another, the interpretation was that the first gave up control and subordinated itself to the other. Since all EAP documents had the term, coordination, liberally sprinkled throughout their pages without much attention to its operational meaning, this led to endless debates over jurisdictional boundaries. The intended synergy from the combined efforts of all parties toward the common EAP goals evaporated in the heat of win-lose bureaucratic politics.

Another mechanism for coordination included in EP-1 was the development of interagency information systems. For FTM, information system development was the heart of its role in the EAP. In addition, though, as part of their institutional capacity-building, each of the EAP implementing partners was to set up information systems to track progress on various types of indicators, with ONE serving as a kind of central repository and clearinghouse. Much of the data called for depended upon sources external to a single agency, thus the intent was that shared information, collected on mutually agreed-upon indicators, would facilitate coordinated action. To date, most of these information systems remain in the initial stages of development. Dialogue has taken place on choice of indicators, levels of detail in information collection, the threat of excessive data-collection burdens at the field level, and the possibility of information overload at the center. Agreement on these information issues has been elusive, because they relate closely to the questions of autonomy, authority, responsibility and hierarchy that lie at the core of the EAP implementation network. The search for effective coordination among the various implementors involved in the EAP continues up to the present.

### 3. The Experience of the National Office of the Environment

At the nucleus of Madagascar's EAP is ONE.<sup>5</sup> As conceived in the Charter and in EP-1, ONE was intended to be a small but powerful unit, staffed with senior-level technicians, whose mandate was to serve as leader, orchestrator, and monitor of the EAP. The office's founding decree (No. 90-666) enumerated an ambitious list of responsibilities. These duties were further elaborated in EP-1, where ONE was assigned responsibility for carrying out Component 7 and overseeing the other six (see Table 1). ONE was originally charged with: design and application of environmental assessment procedures; environmental training, education, and awareness; formulation and monitoring of environmental policy; management and reporting for the GOM on EP-1's progress and financial status; and coordination of the entire EAP effort. To carry out these tasks ONE was also supposed to develop and operate an interagency information system, and coordinate all donor assistance under the EAP.

ONE was originally housed under the tutelage of the Ministry of Economy and Plan. Since the MEP was one of the most influential ministries in Madagascar, this attachment was intended to give ONE the political pull necessary to obtain compliance and influence decisions on environmental policy and implementation of the EAP. This clout was to be reinforced by the high-level policy support of the National Coordinating Committee for Development and Conservation Activities, and the operational support of the COS.

Soon after its establishment, however, ONE suffered a series of debilitating setbacks. Internally, the office was wracked with personal frictions between ONE's Director General and his Deputy Director. In 1991 the conflict came to a head when the Director General fired his deputy. The deputy, however, who was a founding member of the CAPAE and had powerful political connections, was nominated as Chairman of ONE's board of directors. In that capacity he then convinced the board to fire his former superior and named himself acting Director General while maintaining his position as Chairman of the board, an obvious conflict of interest. After an extensive search for a replacement, a new Director General was selected and approved by the GOM at the end of 1992.

The senior leadership feud prevented the kind of team-building and working consensus that the new unit needed to begin to take hold of its numerous responsibilities. The tensions filtered down to other staff, with some considering the new Chairman to be overly controlling and failing to place the interests of ONE above his own. Others sided with their new leader. These negative internal dynamics also affected donor agency and Malagasy collaborating organizations' perceptions of ONE. They saw ONE as more concerned with personal agendas than with managing EP-1 or the EAP.

Concurrent with the internal office strife, external forces battered ONE as well. In 1991, ONE's organizational affiliation was shifted from the MEP to the Ministry of State for Agriculture and Rural Development (MARD). In the eyes of Malagasy and donor observers, this change constituted a bureaucratic demotion, and signaled a possible reduction in commitment to the EAP on the part of the GOM. Later that year the political upheavals accompanying Madagascar's government transition led to the eight-month near shutdown of all public agencies.

ONE continued to operate, but the strike held up decisions on regularizing the status of ONE employees, who worked on month-to-month contracts with no security or agreed-upon salary schedule. The strike also impeded ONE's ability to establish working relationships with other ministries and agencies that were implementing various EP-1 components, which dealt a critical blow to the coordination and collaboration the EAP implementation structure required to operate smoothly (see Annex A).

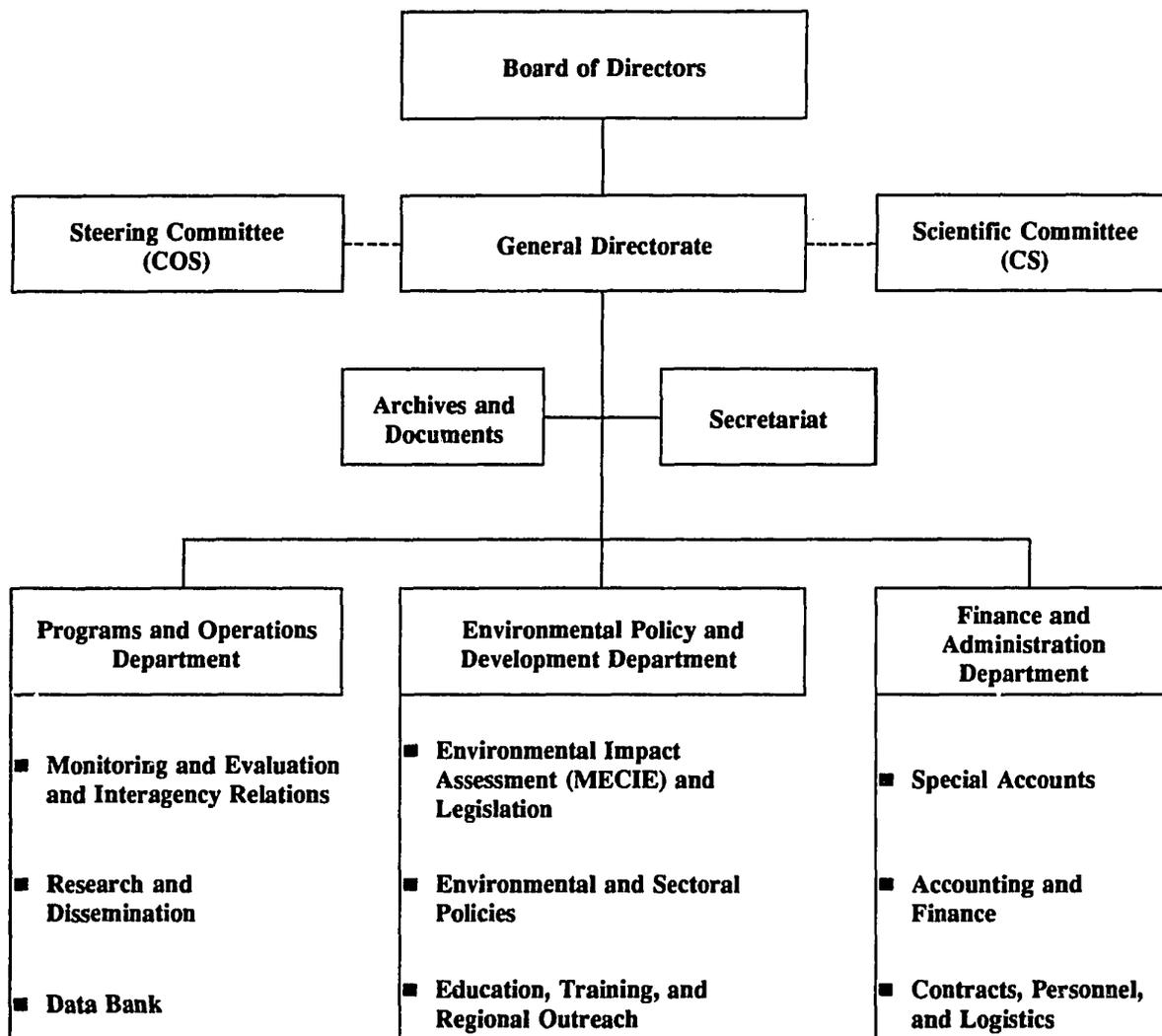
With ONE apparently unable to lay the internal groundwork for effective operations, and with its credibility among the other EAP implementing agencies slipping away, the donors became increasingly concerned over the implementation of EP-1. Because the internal weaknesses of ONE were the most visible symptoms of implementation problems, the donors zeroed in on the office's internal management. Numerous supervision missions and study teams scrutinized ONE, and made recommendations. A common thread to the proposed solutions was a revised organization chart or organigram. These graphics came to encapsulate one of the core institution-building challenges for ONE: how to clarify its institutional mandate and develop an organizational plan for achieving it. Over a two-year period ONE, with the help of both local consulting firms and expatriate technical experts, produced four different organigrams.<sup>6</sup> Figure 1 shows the organigram proposed for ONE at the time of this study.

As ONE's internal management problems were being analyzed, events in the office's institutional environment added new uncertainties to EAP implementation. In September 1992 the MARD, ONE's "tutelle," announced the creation of an Environmental Commissariat, with a mandate to oversee implementation of environmental policies and the operations of ONE (Decree No. 92-812). This announcement took both ONE and the donors by surprise, who were concerned about the legal and political implications of the new commissariat. In Madagascar, it requires a law to change a law, so many felt that the Charter, which had not mentioned the formation of such a body, did not authorize its creation.

After three months of meetings and reviews of the EAP legislation, the GOM clarified its position, indicating that the Environmental Commissariat's role and responsibilities would not conflict with the international donors' funding agreements under EP-1. It was agreed that the head of the Commissariat would serve as president of the COS. Some interpreted the creation of the Commissariat as an achievement of the institutional foundation set forth in the Charter. However, others interpreted this development as a sign of lack of GOM commitment to ONE, and another case of the ascendancy of politics over technical considerations (Furst 1993). The language of the decree establishing the commissariat, did not help resolve the various interpretations, being vague regarding the commissariat's responsibilities and authority vis-a-vis ONE.

These events aggravated the confusion over interorganizational roles and relationships in implementing the EAP, and once again called into question ONE's credibility and viability. The GOM and the donors recognized that the range of responsibilities assigned to ONE was too broad for a small, newly established unit to deal with. Thus, recent and ongoing discussions have focused on how to reduce ONE's mandate to a set of doable tasks without sacrificing the coordination function important to orchestrating the linked components of EP-1.

Figure 1. Organization Chart for ONE (April 1993)



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Some of ONE's problems have been resolved, for example, the personnel and salary issues (see ONE 1992e). The office began hiring additional staff in the spring of 1993. Staffing issues relate directly to the debate over what realistically ONE is capable of doing. The technical and professional experience of current staff varies considerably. The Director General has a wide range of contacts in the public and private sectors that in principle could support EP-1's interests. However, he is not perceived as a strong, hands-on manager. Others have been with ONE since its beginning and play a critical role in the internal workings of the organization. Their institutional memory facilitates the daily functioning of ONE and serves to maintain consistency and stability during a time of turbulence. The new staff will fill key posts for monitoring and evaluation. Their ability to rise to the challenge of this fluid and amorphous bureaucratic setting will be critical to helping ONE move ahead.

Under the new government of the Third Republic, ONE remains attached to the MARD, which now includes the DEF as well. The new prime minister reduced the number of ministries from the 36 created during the transition period to appease the numerous political parties, gain support, and build ownership for political change. The prime minister has also called for the creation of an ad hoc interministerial commission to examine environmental policy and legislation. A potential placement for ONE could be attachment to the commission as its secretariat. MARD at present, however, advocates retaining ONE under its "tutelle." Among some observers, the argument that ONE should be attached to an entity with supraministerial functions remains compelling. This issue is likely to be raised by the donors at a later date, once the prime minister has had more time to establish working relationships with the newly configured set of ministries.

#### **E. Current Status of Madagascar's Environmental Action Plan**

As a World Bank representative noted, with significant understatement, "designing the EAP was relatively easy, implementing it is much harder." EP-1 anticipated the need to adjust to external events and be flexible to adapt to changing circumstances, as the passage from the program's appraisal document quoted above indicates. Events in Madagascar over the past several years, however, have required a degree of flexibility and adaptation far beyond the norm. Poor countries like Madagascar and others on the African continent have difficulty implementing policy reforms under the best of circumstances. Thus, the perspective on Madagascar's EAP should not concentrate solely on the gap between planned targets and current status, but should also take into account what has been accomplished in an operating environment characterized by significant instability and upheaval.

Not surprisingly, those implementing agencies whose legal status shielded them from the political tumult and whose resource flows were uninterrupted fared the best. This category includes the NGOs: both ANGAP and ANAE at the center, and their field operators at the local level. Their legal status as private entities meant that they could pursue their programs independently of what was happening to the GOM development ministries. Their funding came from donor agencies and was not, for the most part, restricted by conditionalities. Further helping to protect these groups from interference was the full-time, in-country presence of two of their major donors, USAID and the Swiss. American and Swiss staff were highly effective

buffers and lobbyists for ANGAP and ANAE, and the components of EP-1 they are responsible for.

Conversely, EAP implementors situated in the public sector and dependent upon receiving national budget resources, or upon the GOM meeting donor conditionalities over which they had little control, made less progress in implementing the EAP. The long public sector strike was especially debilitating in terms of advancing the GOM capacity-building aspects of EP-1, which were at the heart of the EAP's start-up. Strongly impacted by the turmoil were DEF, FTM, DDRA, and the various scientific research centers (CNRO, CNRE, and FOFIFA), whose activities essentially ground to a halt. ONE was less strongly affected, paradoxically because its public sector status had yet to be finalized. Since the end of the strike, much of 1992 and 1993 has seen cautious bureaucratic behavior. With large numbers of new actors and a new set of ministries, plus the uncertainty of not knowing what would happen when the new government was elected in June, few public sector EP-1 managers have been willing and/or able to forge ahead with their programs to make up for "lost time."

Neither have these public managers been able to benefit from the buffering and lobbying by in-country donor agency staff during this difficult period to the same extent as the NGOs. During the design of EP-1, the World Bank resident representative was a staunch advocate of the EAP. However, the Bank's EP-1 manager is based in Washington, and makes about two or three trips per year to the country. The current resident representative is caught up in the Bank and GOM concerns with economic restructuring, and to date has not focused on EP-1. Similarly, the MDS, another potential source of donor backing and pressure for the EAP, is also based in Washington, and cannot be in Madagascar more than intermittently. USAID/Madagascar, by a combination of design and default, has become the lead in-country interlocutor with the government on the EAP. Much of the progress made in policy changes during this period is directly linked to ongoing dialogue and lobbying by USAID staff in support of the Mission's project and non-project assistance portfolio. For example, the GOM has produced draft legislation on environmental impact assessment policy and procedures ("Mise en Compatibilité des Investissements avec l'Environnement," or MECIE), which ONE is in charge of finalizing and applying.<sup>7</sup>

Despite the EAP's delays and setbacks during a time of tremendous sociopolitical ferment in Madagascar, many of the changes underway will, if they are pursued, help the EAP and its policy targets. More open and participatory government can facilitate a wider Malagasy dialogue on environmental issues, especially the trade-offs between conservation and development. Wider participation, in turn, can foster more responsiveness of public environmental agencies to stakeholders. Decentralization can contribute to better and more equitable service delivery capacity; coupled with local revenue generation it can promote increased sustainability of services as well.<sup>8</sup>

In the midst of this period, the GOM's fulfillment of EP-1 terms and conditions, albeit delayed and in some cases partial, can be seen as a positive indication that the government intends to stay engaged in the EAP. Within the GOM and among its private sector partners are a core group of Malagasy committed to the EAP. Ultimately the success of the EAP will depend

on them and their ability to build a widening national constituency for environmental policy reform. The EAP was designed with a 15-20 year time horizon; in terms of policy implementation Madagascar has only just begun to tread the path toward that horizon. It is too early to proclaim victory or declare defeat.

### **III. ASSESSMENT OF MADAGASCAR'S EXPERIENCE WITH IMPLEMENTATION OF THE ENVIRONMENTAL ACTION PLAN**

The framework identifies six characteristics associated with successful implementation. The analytic approach is to examine the extent to which the Madagascar EAP case appears to fulfill, or not, these conditions. This section presents our assessment.

#### **A. Specification and Consistency of Objectives**

**The policy contains clear and consistent objectives, or some criteria for resolving goal conflicts.**

As many observers have noted, the EAP's policy framework, as expressed in the Environmental Charter, is broad and relatively vague. The overarching objective is the pursuit of sustainable development, and the level of generality of the policy statements masks potential inconsistencies or conflicts among individual policy targets. Because the EAP contains not just a single policy but an ambitious set of policies all related to environmental issues, the possibility of achieving clarity and consistency among them is reduced. The Madagascar case illustrates a highly difficult policy implementation situation, if for no other reason than the sheer number and complexity of the policies being undertaken under the umbrella of the EAP.

The situation is complicated by the confusion over what, in operational terms, constitutes the EAP. The question here is whether the EAP is something more than the sum of donor-funded projects and programs in the environmental sector. In principle, the rationale for developing the EAP includes assuring greater consistency among the policy targets of donor-funded environmental activities. Interviews with Malagasy and international donors alike revealed that the distinctions between the various frameworks have become blurred. The NPE (the policy framework) in large measure follows the concepts and approaches elaborated in the EAP. The EAP is ultimately the means for implementing the NPE. Subsequently the EAP is broken into three programs, referred to as the Environmental Programs, Phases I-III (referred to as EP-1 from 1991-1995), EP-2 from 1996-2000, and EP-3 from 2001-2005). The multiple frameworks often create confusion, as one attempts to determine which framework is being used as the point of reference.

The possibility for goal conflict arises from two sources. The first occurs at the level of the more specific policy objectives elaborated under the EAP, for example, those contained in EP-1's components: land policy, environmental impact policy, biodiversity policy, and tourism policy. The second emanates from the friction between environmental and resource management policies and other sectoral policies. This conflict is revealed in the tension, often mentioned in the team's interviews, between conservation and development goals.<sup>9</sup>

To expect conflict resolution criteria in the environmental policy arena in Madagascar is unrealistic given the high degree of social and political turmoil the country has undergone in recent years. In this respect, Madagascar's situation parallels the reform movements in many developing nations on the African continent. This condition for effective policy implementation

is not likely to be fulfilled in the near future, since resource issues cut to the heart of basic economic and social concerns. However, even in the industrialized world, the debate over the appropriate valuation of natural resources relative to socioeconomic needs is far from reaching a resolution. Thus, the existence of conflicting policy perspectives is an ongoing feature of implementation in the environment and NR sector, and in Madagascar progress has been made despite these conflicts, for example, the work done on ICDP selection criteria.

#### **B. Incorporation of Adequate Knowledge of Cause and Effect**

**The policy accurately identifies the principal factors and linkages leading to, and influencing, policy outcomes, including specification of target groups and incentives.**

As the story of Madagascar's EAP makes clear, the development of the plan was supported by years of studies and analysis of environmental problems. The impetus for much of the early analytic work derived from concern for biodiversity preservation and resource conservation expressed at the 1985 conference. Subsequent studies, though, looked at the connections to sustainable agriculture and development. The Environmental Charter clearly incorporates the conservation-development policy linkages. However, the EAP and the donor-funded projects being implemented to achieve its goals are weighted toward NR conservation policies, emphasizing "green" issues and protected areas. Thus from some perspectives, the policy framework, as operationalized through donor-funded programs, is incomplete in terms of incorporating the full range of cause-effect linkages important for sustainable NRM. However, as EAP implementation progresses, this range is being expanded in the direction of linking the "green" and "brown" issues, e.g., the environmental impact (MECIE) legislation currently under development.

The EAP recognizes that many of the relevant cause and effect linkages in NRM need to be better understood, including both its technical and socioeconomic dimensions. The plan includes environmental research in a number of areas, such as terrestrial, coastal, and marine ecosystems. It also includes experimentation with ICDPs, via ANGAP and ANAE, where a key concern is attention to incentives for resource protection. In addition, for example, USAID is supporting a series of field research studies of community-level NRM that directly addresses issues of incentives and target groups for policy reform.

The establishment of monitoring and evaluation systems within various agencies charged with implementation responsibility should provide the EAP with a mechanism to improve understanding of the links between program actions and policy outcomes. Thus over time, the extent to which Madagascar's EAP fulfills this condition for successful policy implementation should increase, assuming the information collected in the various monitoring and evaluation systems is fed into the decisionmaking process.

#### **C. Appropriate Implementation Structures and Processes**

**Policy implementation is structured to maximize the probability of compliance from implementing agents and target groups. This includes assignment to capable and**

**sympathetic agencies, supportive operating procedures, sufficient financial resources, and adequate access to supporters.**

Both written and interview sources confirm that the constraints to meeting this implementation condition are a major source of difficulty in implementing the policies in Madagascar's EAP. On the positive side, where substantial progress has been accomplished (ANGAP and ANAE), they cite the key role that fulfillment of this condition's elements has played in achieving success. Thus, Madagascar's EAP experience corroborates the contribution of appropriate organizational arrangements to policy implementation outcomes.

The EAP's implementation provisions reflect the ambitiousness and complexity of the plan's policy targets and activity components, as well as judgments about the relative strengths and weaknesses of government, voluntary, and private actors. The EAP brings together a network of public, NGO, and private sector entities, and sketches the outlines of their roles in EAP implementation. Major implementation responsibility has been assigned to three newly-created organizations -- ONE, ANGAP, and ANAE -- whose operational capabilities are still in the embryonic stages. The latter two are semi-autonomous, the first sits in the public sector, which has significantly hampered its room to maneuver. However, how to orchestrate compliance with the EAP's intent is not immediately clear, and efforts to do so have had only partial success. ONE is intended to be the "bandleader," but has been buffeted by leadership struggles and turnover, staff vacancies, shifts in "tutelle" (bureaucratic supervision) assignments, and politically-induced paralysis.

### **1. Central-level Implementation Structures**

The EAP's design depends heavily upon central-level interagency coordination to achieve policy and program targets. However, implementing agents have not given in-depth attention to defining the nature of that coordination in operational terms. As a result, there is substantial confusion and lack of agreement on what coordination means in the EAP context. The interorganizational waters were further muddied by the politically-driven creation of the Commissariat for the Environment, which injected one more coordinating entity into the network, although so far it has not intervened in EAP implementation. The government and the donors continue to discuss the scope of ONE's coordinating functions in the face of that office's credibility problems. Effective coordination is also constrained by weak institutional incentives to pursue joint objectives as opposed to individual agency agendas (see additional discussion in Section IV).

A key concern for structuring interagency implementation of the EAP is ONE's organizational placement. There is a strong current of support for a hierarchical strategy to address ONE's environmental policy coordination mandate. In the strongly hierarchical Malagasy public sector, ONE's attachment to the MARD at the level of a general directorate places the office at a disadvantage in attempting to exercise fully its coordination function. However, in and of itself a higher-level "tutelle" may not necessarily facilitate ONE's interagency relations. First, because the public sector, like much of Malagasy society, is highly personalized, a great deal depends upon the particular individual who occupies the superior position. For example,

the naming of a relatively powerless person to head the Commissariat for the Environment has effectively rendered that entity essentially impotent despite its organizational location. Arguments for ONE's attachment to the prime minister's (PM) office are based on the assumption that high-level placement in fact reflects a power base, commitment, and interest on the part of the PM regarding ONE's mandate and activities (e.g., Furst 1993). Without the actual and implied clout deriving from high-level support, a nominal attachment to the PM's office will not help ONE carry out its cross-sectoral mandate.

Second, to be an effective voice at this level, ONE needs a degree of credibility that it currently does not possess, i.e., senior, experienced staff who can serve as interlocutors for environmental issues at the highest levels of government, and an established track record. While some individual staff members have credible reputations, ONE as a unit is too new as yet to have attained these kinds of credentials. There is a risk of falling short of the mark in a highly visible arena, with negative repercussions for the EAP.

An alternative, or perhaps a complementary approach, is to take a more horizontal strategy. This would entail such things as: a) encouraging the formation of coordinating units ("cellules d'appui/concertation") within the sectoral ministries that would serve as ONE linking structures, b) utilizing the sectoral representation of ONE's board of directors ("Conseil d'administration") as a way to induce intersectoral coordination, and/or c) expanding the role of the Commissariat for the Environment and the COS in managing interagency relations. Under this strategy, whether ONE remains attached to the MARD is less of an issue. The use of sectoral ministry units as a means of coordination is under discussion for implementing the MECIE legislation.

Both strategies require clarification of the organizational mandates and operational roles and responsibilities of the agencies involved in implementing the EAP. On the content side, this clarification includes: a) definition and development of common understanding of terms such as coordination, collaboration, execution, and so on; b) distinction among and agreement on different levels of management responsibility; and c) elaboration of criteria for assessing the utility and applicability of the definitions and distinctions that are developed. On the process side, this calls for a mechanism that brings the relevant actors together in a way that facilitates joint problem-solving while minimizing interagency infighting.

## **2. Local-level Implementation Structures**

At the local level, NGOs are key structures for EAP implementation. For the biodiversity component of the EAP, ANGAP is the linkage mechanism to the field level through its performance contracts with NGOs for management of protected areas. As noted in Section II, ANGAP has delegated authority from DEF to oversee management of selected protected areas in furtherance of DEF's nationwide protection mandate. The team's interviews revealed some contention over the degree of delegation and the latitude for local-level decision-making by NGOs with area management contracts. NGO contractors expressed the view that the procedures used for resource allocation and oversight are excessively heavyhanded and constraining, whereas

ANGAP leadership felt that such procedures were necessary for accountability and planning purposes.

A similar implementation structure characterizes ANAE and its miniprojects. These are managed through local contracts to NGOs and overseen by ANAE. By all accounts, this implementation arrangement has been quite successful. ANAE's strategy has been to start small in response to expressed community needs, and build local capacity for ongoing activities as part of the process. Most miniprojects are located in rural regions of the country where existing formal institutional structures are either absent or nonfunctional. Thus, creating alternative action mechanisms or rejuvenating existing ones are key to taking on additional projects and future implementation success.

While ANAE's record with local-level implementation has been highly positive to date, some conflict has arisen between ANAE's demand-driven approach and the pre-established targets of the EAP. ANAE is under pressure to concentrate its miniprojects in the buffer zones around the protected areas where ANGAP's contractors are active as a way to increase the impact of EAP activities in the short-term. ANAE argues that this risks undermining the dynamics of the devolutionary implementation structures that its initiatives have been nurturing with local communities. Another source of pressure on ANAE to select particular communities for projects comes from DDRA and FTM, who have responsibility for the cadastral surveys, pilot land titling, and mapping components of the EAP. In both these situations the dilemma for the EAP is what to do in communities where the initial felt needs do not fit with the favored choices on the NR conservation menu.

ANGAP's and ANAE's experience demonstrates the potential conflict between: a) creating decentralized implementation structures that are successful in inducing desired behaviors from local resource user groups, and b) linking those structures to the central-level policy implementors whose major concerns are the broader EAP policy targets and programs. For EAP implementation, one question with regard to structure is how to maintain program coherence without stifling local initiative and creating disincentives for community participation, and how to meet planned targets without overwhelming nascent local capacity.

#### **D. Management Capacity and Commitment**

**Leaders and top managers possess sufficient strategic management and political skills, and are committed to the policy objectives.**

As interviews and written sources pointed out, Madagascar shares with other developing countries a human resource constraint regarding managerial capacity. This constraint is acute in the public sector, and has been exacerbated by the political turmoil of the last couple of years, particularly the strike that severely restricted the operations of government agencies in 1991-92. ONE, as a public-sector unit, has suffered staff shortages and motivation difficulties, which has hampered effective start-up and fulfillment of its coordination role in the EAP. Recent hirings and regularization of ONE employee status should help to address some of these capacity weaknesses.

The EAP's implementation approach mitigates some of the managerial capacity problem by reaching beyond the public sector to make use of semi-autonomous associations and agencies like ANGAP, ANAE, and COMODE, and to use NGOs as local-level implementors. However, management capacity in the local NGO sector remains weak, and poses a significant constraint to field-level implementation of NRM efforts. Madagascar shares the co-management approach to NRM that many African countries are experimenting with on an increasingly widespread basis. The government's decentralization program should further facilitate access to a wider pool of managerial talent, as well as contribute to building additional sources of capacity.

Regarding type of managerial skills, the EAP calls for a different mix of skills from those required for routine administration. The prevailing managerial ethos, a heritage of the country's colonial and socialist past, is strongly hierarchical, with an emphasis on control and application of standard operating procedures. Managing the EAP, though, calls for creativity, flexibility, and pragmatism. Because of the EAP's long timeframe and its interorganizational network of implementors, the control orientation is particularly ill-suited. The EAP places a premium on strategic management skills, such as, stakeholder identification and constituency building, policy legitimation and public relations, resource accumulation and mobilization, collaboration with multiple organizations and groups, and proactive leadership. However, several interviewees reported that in some agencies top managers pay too much attention to internal administration, day-to-day details, hierarchical supervision, and responding reactively to donor agencies, while neglecting the long-term, strategic dimensions of managing the EAP.

Assessments of commitment are difficult to make. Nonetheless, several observations are worth noting as indicative of sources of implementation problems. First, particularly at the central level, managers appear more committed to their individual agencies' interests than to the overarching goals of the EAP. This is understandable in an environment where resources are scarce and bureaucratic interactions are played out in win-lose terms, but constitutes an implementation roadblock where agencies and groups are dependent on each other for funds, information, approvals, and outputs. Without measures that serve to build commitment among key implementors for the EAP's long-term targets, implementation is likely to suffer. This does not mean replacing managers' dedication to their own agencies with some sort of "higher order" allegiance, but rather devising strategies that link individual agency commitments to their narrow interests to the larger EAP agenda, most likely through bargaining and exchange strategies.

Second, in the view of the majority of Malagasy interviewees, the pace of EAP implementation is being driven by donor requirements, which are not necessarily sensitive to the politically turbulent Madagascar setting. Donor-recipient government tension is a widespread characteristic of developing country international relations, and Madagascar is not atypical in this respect. Thus, some of these statements are more reflections of frustration with dependency on external resources than accurate assessments of fact. However, the question of commitment to the environment and the EAP remains. In some cases, it may be that expressions of commitment are motivated by the desire to obtain donor funds, instead of genuine devotion to changed environmental and NRM policies. This raises the issue of "real" versus expedient commitment. The issue cuts both ways, though, in that donors need to maintain their commitment to the

environment over the long-term, something that could prove difficult given the tendency of donor support to shift priorities in response to their own bureaucratic politics.

Because of the range of policies included under the EAP umbrella, commitment to policy targets varies depending upon which policies are considered. Differences arise between the strict conservation and the development-conservation policies in the EAP. The team's interviews revealed repeated variations on the "help people, not just lemurs" theme, suggesting a perception that the EAP emphasizes too little of the former and too much of the latter. The implication is that some Malagasy implementors are less enthusiastically committed to the biodiversity aims of EAP than to its rural development objectives.

#### **E. Stakeholder Support and the Legal System**

**The policy receives ongoing support from constituency groups and key stakeholders within a neutral or supportive legal system.**

The Madagascar case contains a wide range of stakeholders, both international and national, with interests in the EAP. As Section II elaborates, members of the international environmental NGO community have supported the EAP from the stage of background technical analysis, through the preparation of the plan, to implementation. Their interest and support has concentrated mainly on the biodiversity and conservation elements of the EAP, and has contributed to the high international visibility of Madagascar's environment. Bilateral and multilateral donor agencies are another critical international stakeholder group. Their programming and resources are essential to EAP implementation, as is the support/pressure for making progress on projects under the EAP.

Key Malagasy stakeholders in the EAP are the public sector actors whose agencies are dependent upon the donor resources that the EAP provides. As mentioned above, their support for the EAP is problematic in that their individual agency allegiances have a tendency to compete with and/or supplant backing for the larger aims of the plan. The staff of ANGAP, ANAE, COMODE, and the NGOs that are implementing protected area management contracts and ICDPs are also stakeholders whose actions are important for EAP implementation. These groups, particularly ANAE and COMODE, have begun to provide a link to local-level stakeholders, e. g., farmers and other NR users. These stakeholders have, to date, been the least involved. Yet, their actions are critical to the ultimate success or failure of sustainable development and NR conservation.

Because the EAP contains a range of policies, meeting this condition for effective implementation becomes highly complex. Each policy has a particular set of stakeholders, and although the stakeholder groups may be the same for some policies, the positions and interests of the stakeholders will vary. EAP implementers need to pay attention to assure that key actors are not left out of the constituency-building and negotiation process for a given policy reform. For example, the team's interviews regarding the MECIE legislation revealed complaints from several bureaus that had not been party to the interagency discussions on the MECIE and its implementation arrangements.

The strength of Malagasy popular support for the policy directions of the EAP appears limited, and according to our interviews, some of the indigenous support for the plan as described in various international fora has been overstated, particularly the biodiversity aspects. Given the extreme levels of poverty in Madagascar, the rural majority is more concerned with eking out a living day-to-day than with the longer-term conservation of the environment.

#### **F. Socioeconomic and Political Stability**

**Socioeconomic and political conditions remain sufficiently supportive and stable so that the policy is not undermined by changes in priorities, conflicts, and/or radical shifts in resource availability for implementation.**

Madagascar's recent political history has made fulfillment of this condition problematic for all policy changes, including the EAP. The EAP's implementation environment has been anything but stable. Popular pressures led to the downfall of Ratsiraka's socialist dictatorship, the establishment of a transition government, and a democratic presidential election. A general strike shut down the government for eight-ten months in 1991-92. Under the transition government in 1992 the number of government ministries ballooned from 18 to 36, which greatly expanded the field of players whose interests need to be taken into account in government decision-making. Parliamentary elections were held in June, following which a prime minister was chosen. The new government has restructured the GOM ministries over the summer by eliminating some and combining others.

With the ongoing political turmoil the GOM's focus on environmental issues has fluctuated, leading donors at times to suspend activities in the sector until commitments were reaffirmed. Thus the priority the EAP has received from the GOM has not been constant. The effects of shifting and reduced priorities have had a decided impact on the institutional arrangements for implementing the EAP, as the fate of ONE demonstrates. At the regional and local levels, governing structures are also in flux as the GOM, with donor support, rethinks its approach to decentralization and governance.

Resource availability for implementation is a critical concern given the GOM's dependence on external support. Madagascar's economy continues to perform relatively weakly, unemployment is high, and poverty levels show no signs of declining. Thus it is unlikely to expect a significant GOM contribution to activities in the environment sector beyond what the donors are providing. Government ability to follow through with implementing the EAP would be greatly reduced without stable donor resource flows (cf. ownership/commitment issues mentioned above).

#### **IV. KEY EAP IMPLEMENTATION ISSUES: COORDINATION AND COLLABORATION**

The preceding section has analyzed Madagascar's EAP in terms of the opportunities for, and constraints to, successful policy implementation. The fact that Madagascar's experience with the EAP demonstrates some problems in meeting the six conditions should not necessarily be taken as an indication of pessimism regarding the future of the EAP. Rather, the six conditions can be used as a guide to focus attention on where and how to intervene to increase the chances for successful implementation. The Madagascar case illustrates that the GOM, and the donors working with the government, are already taking some actions along the lines that our analytic framework would suggest as appropriate.

Among the six conditions, the analysis in Section III highlights the critical importance of solving the problem of implementation structures that effectively link the various organizations and groups working under the umbrella mandate of the EAP, and yet simultaneously allow each entity to pursue its individual goals. This section delves more in depth into the issues of coordination and interorganizational collaboration.

##### **A. Coordination Structures in the Environmental Action Plan**

The structure of Madagascar's EAP is a classic example of an interorganizational implementation network. For any development intervention larger than a (relatively modest) sectoral project, implementation inevitably brings together multiple agencies and groups that are intended to work in concert to achieve a set of objectives. The scope and breadth of the EAP calls for the creation of an implementation network that is larger and more complex than project or program structures. How to design and manage coordinated implementation networks is a key question for Madagascar's EAP, and for other African countries in the process of designing or implementing NEAPs.

##### **1. Defining Coordination**

Coordination is a term that is frequently called for as a solution to project and program implementation problems, and the EAP is no exception. However, it is rarely elaborated in an operationally meaningful way beyond a vague notion of some sort of programmatic linkage. One way to think about coordination is in terms of three types of activities: information sharing, resource sharing, and joint action (Honadle and Cooper 1989). Information sharing essentially involves communication, one agency or subunit letting another or others know what it is doing. This can be done through distributing written reports, holding meetings of various sorts, or setting up information units. Resource sharing means that resources controlled by one organization are allocated to another for particular purposes. Examples here are loans, grants, contracts, and/or secondment of personnel. Joint action entails two or more entities collaboratively undertaking some activity together, either simultaneously or sequentially. Joint activities could include planning, data gathering, service delivery, monitoring, training, and/or supervision. Each of these types of coordination imply greater or lesser degrees of linkage among the organizations involved.

## 2. Coordination and Collaboration in Implementation Networks

The defining feature of implementation networks is that they cross individual organizational boundaries. To accomplish the overarching goals of the network requires that individual implementors somehow combine their efforts in ways that are mutually supportive.<sup>10</sup> The EAP assigned functions to a range of existing public and private sector agencies, based on assessments of their relative strengths and capacities. It has created several new entities as well. Within the EAP network, all of these agencies and groups are linked at a variety of levels, each pursuing its own particular set of activities. As Section II described, the EAP uses three coordination mechanisms to facilitate collaborative linkages: contracts, interlocking memberships on interagency committees, and shared information systems. These coordination mechanisms establish a set of hierarchical relationships among the various EAP network members that extends from the center to the periphery. They all involve varying degrees of information exchange, resource sharing, and joint action.

For coordination of any variety to be effective, though, it must deal with three interorganizational problems: threats to autonomy, lack of task consensus, and conflicting requirements from vertical and horizontal linkages (see Brinkerhoff 1991). Each of these three problems appears in the EAP implementation experience.

Threats to autonomy: A core dynamic in most organizations is to try to maintain as much independent control over inputs, outputs, and operations as possible. To the extent that coordination requirements impinge upon agency independence, they will be reluctant to coordinate. These threats are increased in situations where stakeholder interests are diverse, cooperating agency operational procedures are different, resources are scarce, and linkages among agencies are abundant and complex.

The EAP experience exhibits all of these features. Its implementation network creates numerous threats to autonomy among the actors involved. For example, the conflicts between ANGAP and its field operators reflect varying views on the appropriate degree of autonomy of action.

Lack of task consensus: Task consensus means agreement on the client groups to be targeted, the actions to be undertaken, the services to be provided, the methodologies to be employed, and so on. Because many of the technologies for socio-economic development are only partially understood or are site-specific, lack of agreement on what to do, for whom, and how is highly likely. However, without some minimum level of agreement, cooperation is difficult. In this area as well, diversity among stakeholder perceptions and interests, multiplicity of linkages, and scarcity of resources aggravate this coordination problem.

Our interviews revealed agreement on what the general tasks are within the EAP framework, a moderate degree of consensus on target groups and their needs, and high levels of debate over how best to carry out those tasks to achieve environmental policy objectives. A key example is the discussion of how to blend conservation-oriented efforts for the long-term with development interventions designed to deal with immediate economic survival needs. Much of

what the EAP aims to accomplish is experimental, and thus one would not expect to find a high degree of task consensus at this point.

Another example is the task of coordination itself. ONE, ANGAP, ANAE, DEF, COMODE, and others are all charged with some form of coordination. Yet among these actors, there appears little consensus on what it means for them operationally. Particularly among the public sector actors, the tendency is to interpret coordination as close programmatic monitoring and control, a view not shared by the intended subjects of this scrutiny.

Conflicting vertical-horizontal requirements: Most members of implementation networks belong to more than a single system, and frequently coordination places the unit whose actions are to be coordinated in a situation where it is subject to conflicting demands. The most common conflict is between the requirements for participating in lateral coordinated action at the field level and in vertical sectoral hierarchies. Diversity of stakeholders contributes to vertical-horizontal strain; and the potential for this conflict is high where resources are scarce, because agencies have little slack available and rarely are the costs of coordination factored into operating budgets. Complex and diverse linkages also heighten the probability of conflict, because there are simply so many connecting threads that some degree of working at cross-purposes becomes inevitable.

This coordination problem emerges in the EAP in several spheres. For example, ONE, as a unit of the MARD, occupies a department-level position in the public sector hierarchy, and yet its mandate calls for a significant cross-ministerial role. In the strongly vertical Malagasy public sector system, ONE's mandate immediately creates a multiplicity of "turf" issues. Similarly, although to a lesser degree, ANGAP's vertical relationship with the DEF is on occasion at odds with the demands of its horizontal linkages with other EAP actors.

The number and variety of donor agencies supporting EAP implementation also contribute to vertical-horizontal conflict, because their programs and projects under the EAP normally call for procedures and practices on the part of implementing entities that are exceptions to standard procedures in those entities' "tutelle" hierarchies. In fact, a major source of pressure for coordination comes from the donors. This is a new behavior for most Malagasy entities, whose francophone tradition makes them much more attuned to superior-subordinate linkages that are spelled out in official decrees and laws than negotiated partnership arrangements that emerge from externally designed donor programs.

## **B. Recommendations for Improving EAP Coordination and Collaboration**

The above discussion holds several implications for Madagascar's implementation of the EAP. These are presented as recommendations for enhancing the effectiveness of the EAP's implementation structure.

## 1. Concentrate on Developing the "Rules of the Game"

Because the EAP is implemented through a network of organizations, no single actor is "in charge" of EAP implementation in the sense of being able to command compliance from other actors. Achievement of EAP objectives will come from the aggregate result of the various actors pursuing their subgoals, assuming that appropriate implementation incentives can be created. Networks, however, only operate effectively when governed by an accepted set of rules. This suggests the need to focus on developing agreed-upon "rules of the game," an issue many interviewees raised as a target for priority attention.

The types of rules that need specification and negotiation include determination of: who is eligible to make which decisions in which arenas; what actions are allowed, required, or proscribed; what procedures must be followed; what information must be provided, to whom, and when; what benefits and costs are to be assigned to agencies (or individuals) as a result of their actions; and how enforcement will be undertaken. In the EAP, many of these rules are already formally expressed in national legislation, administrative regulations, bilateral and multilateral program and project agreements, and donor agency procedures. However, rules (formal and informal) to govern the interactions among the various implementing partners in the EAP are the ones in need of elaboration and discussion. We should remember that rules are ineffectual unless the entities they affect know of their existence, expect that the rules will be used to monitor behaviors, and anticipate sanctions (formal and/or informal) to be applied for non-compliance.

## 2. Search for Win-Win Opportunities for Coordination

The multiplicity of hierarchies involved in the EAP, those internal to the implementing agencies as well as the interagency ones created by the EAP, makes the shaping of consistent action on everyone's part extremely difficult because the threats to coordination operate both internally among agency subunits and across agencies as well. The threat of bureaucratic gridlock is very real, but the temptation to pursue additional hierarchical authority to deal with the problem must be resisted. In highly complex and interdependent situations, management based on hierarchical monitoring and control often sets in motion a downward spiral of minimal compliance and declining performance. Coordination that relies heavily on formal mechanisms enforced by a central unit is rarely successful (Chisholm 1989). A search for a single EAP "steering wheel" is misguided in a situation where numerous actors can have an impact on the EAP's implementation path.

Even if ONE is eventually attached to the prime minister's office, or becomes part of an environmental ministry, it is unlikely that increased hierarchical authority, in and of itself, will give ONE the capacity to coordinate EAP implementing agencies. What such an attachment can provide, though, is a platform from which ONE could launch a credible campaign to develop mutually beneficial relationships among implementors, that is, where all parties feel that they gain something. This connects to the development of the "rules of the game" in that effective enforcement provisions should be based more on principles of joint benefits and value added than on negative sanctions and hierarchical policing.

### **3. Reduce Excessive Interdependencies**

Too high a degree of interdependence in the EAP implementation network risks hampering progress, because the closeness of the linkages restricts advancement to the pace of the weaker members of the network. In terms of operational capacity, the weak members of the EAP network are the public sector actors. The creation of ANGAP and ANAE and the use of NGO implementors at the field level reflect a recognition of this issue. However, some of these linkages remain extremely tight, for example, between ANGAP and DEF, or between ANGAP and its field operators. This suggests the need either to decouple, or more loosely couple, elements of the EAP from each other, despite the risks that this could introduce for targeting impacts. What this could mean is less frequent formal reporting or supervision, more operational autonomy once contracts and workplans are approved, more reliance on informal collaborative arrangements, and/or less information required for existing reporting frameworks. It could also mean less interlocking participation on multiple oversight committees, so as to increase the quality of participation. Looser linkages will have the benefit of reducing most of the threats to coordination as well, thereby increasing the likelihood of cooperation. This issue can be raised as part of the discussion of "rules of the game."

### **4. Shorten Planning Horizons**

From a managerial perspective, a basic rationale in combining market and hierarchical mechanisms in interorganizational implementation structures like the EAP is the added flexibility and responsive capacity that can emerge. However, bureaucratic requirements for excessively detailed and long-term action plans can undermine flexibility and responsiveness. Madagascar's operating environment is in flux, and the experimental nature of many of the EAP's field projects suggest that planning horizons for activities under the EAP should be shortened. This could strengthen flexibility and potential for adaptation to uncertain and changing conditions, and result in a better fit with the nature of the natural resources management task at the field level (Brinkerhoff and Ingle 1989). Further it could help deal with some of the threats to coordination. Actors would be more inclined to collaborate if they were not held to what many see as unrealistic planning timeframes. Planning in smaller increments could increase task consensus by making it easier to agree on what to do in the short term, subject to refinement based on the lessons of experience. The increased ability to finetune activities in the short-term should make achievement of the EAP's 15-20 year objectives more likely.

### **5. Remember the Lessons of the Past**

The EAP's implementation design is reminiscent of the earlier generation of donor-funded integrated rural development (IRD) projects of the 1970s and early 80s. We should be careful not to forget the lessons learned from the IRD experience (see Honadle and VanSant 1985). Administrative integration can be very costly in terms of time, personnel, and financial resources. For example, there is a risk that if the information and monitoring systems under development among the EAP implementors are integrated to the extent envisioned, the result will be an onerous level of information collection at the field level (with increasing resistance to using the systems over time), and information overload at the higher levels (see Klauss 1979).

While concentrated authority can facilitate the efficient delivery of goods and services, it fails as a management solution to building institutional capacity in implementing agencies and transferring skills and technologies to field-level entities. Coordination works best when it combines formal procedures with supportive informal mechanisms (Honadle and Vansant 1985: 29-34).

#### **6. Reduce Expectations for Immediate Performance Improvements**

Implementation networks are extremely complex structures to manage, and call for management, political, and interpersonal skills that can be difficult to find in any country. The EAP's performance targets are quite ambitious in light of this fact. Particularly in terms of interagency cooperation, it is still early to have high expectations, especially given the dramatic changes in the Malagasy political landscape. The implementing agents in the EAP have a relatively short history of working collaboratively and in a non-hierarchical mode. In fact, several key organizations have a short history of existence. Time is an important factor here; game theory suggests that when players do not have much experience with each other, cooperative strategies are less likely. As the number of games repeat, cooperation becomes a more viable (though not inevitable) option (Miller 1992). Despite the problems, there are many positive features of Madagascar's experience with the EAP, and it is likely that implementation performance will improve in future simply as a function of of members of the EAP network gaining more experience in working together.

## V. LESSONS LEARNED

The ultimate value of a NEAP depends upon its ability to foster changes in environmental and NRM practices that lead to sustainable resource use. Linking plans to impacts hinges upon successful implementation, which has been the focus of this study. Because Madagascar is at the leading edge of countries with NEAPs, its implementation experience can serve as an important case study that other countries can learn from. The preceding section offered a set of specific recommendations for Madagascar's EAP that can also be taken as suggestions for others planning or implementing NEAPs. This concluding section offers some summary lessons learned.

The Madagascar case epitomizes the challenge of undertaking institutional development simultaneously with implementing ambitious policy reforms. The EAP established several new entities, each with a critical role to play in moving the EAP from plan to action. These new agencies faced high expectations for immediate performance while their operational capacities were still in the embryonic stage. Further, their bureaucratic environment was turbulent and proved to be, in some ways, relatively hostile. The best way to build capacity is through performance, so the issue is not to try to separate institution-building from action. Rather, the lessons have to do with the timeframe and the scope of action.

- NEAPs that include creating various new organizations, whether in the public or non-governmental sectors, should extend their timeframes for those agencies to reach full operational status.
- In allocating performance tasks to newly created agencies, NEAPs should avoid overloading them with responsibilities from the start. Instead, NEAPs should phase in expanded responsibilities gradually linked to demonstrated increases in capacity. Such an approach can spare organizations the credibility problems that come from trying to do too much too fast, with the result that little is done well.

Madagascar's two years of EAP implementation experience clearly illustrates that, from an implementation perspective, a planning framework is only as good as the processes it puts in place, and the people working to achieve its goals. Appropriate technical analysis is important to lay the basis for getting the right policies developed, but without similarly high quality institutional, social, and political analysis, the right processes, procedures, and incentives for turning the plan into action will be missing. Attention to process is especially important for NEAPs because of the interorganizational mechanisms they call for. Lessons here are:

- Make sure the institutions working together on NEAP implementation take the time to clarify and agree upon their roles and responsibilities in the start-up phase, and periodically during implementation as targets and tasks change. Avoid letting general statements about coordination become catch-all "solutions" to interorganizational interactions.

- **Seek to design appropriate and manageable structures, but do not neglect their informal and personal aspects. Effective implementation processes combine the formal and the informal, because no formal system can be designed to handle all possible contingencies. In many situations, solutions will be developed person-to-person, so who occupies a particular slot can be as important as where the post is officially located, if not more so.**

Another general lesson from Madagascar's EAP is the need to get implementing agencies to think of their individual management responsibilities in terms of the larger picture sketched out by the EAP. Implementing almost any policy reform means that managers' responsibilities will extend beyond their nominal authority. This broader perspective is particularly important in the case of the shared information systems that the Malagasy EAP partners are in the process of developing. It is not enough, for example, for ANGAP managers to think only in terms of using information to manage their own operations effectively, because much of that information, in one form or another, is needed by others to achieve their mandates. This observation suggests that:

- **NEAP implementors, in both public and private sector organizations, need to develop skills in strategic management, which will facilitate environmental policy reform by giving implementors the management capacities needed to operate effectively in complex, multiagency implementation networks.**

## ENDNOTES

1. Estimates of the costs of Madagascar's environmental degradation vary, but the \$200 million figure is widely cited. USAID (n.d.) uses a range of \$100-290 million, broken down as follows: 75 percent of the cost from forest loss, 15 percent from declining productivity of rainfed agricultural land, and 10 percent from increased maintenance costs for infrastructure (e.g., silted dams, clogged irrigation canals, road blockage from landslides). Larsen (1993), however, argues that these costs are overstated.
2. The term "participatory" means different things to different people. During an interview with Francois Falloux, the World Bank leader for the Madagascar EAP in its early stages, he commented that it was clear that in order for resource users to be actively engaged in the conservation effort, they would need to feel ownership of the strategy. Due to the technical nature of the exercise, academics and government officials were included in the process, while Malagasy farmers and herders were not. Therefore, while the new plan could incorporate Malagasy knowledge, it was limited by the lack of interaction with local-level resource users. During EAP implementation, however, there is a strong emphasis on local participation through the ICDPs.
3. The World Bank's Forest Management Project has been working with the DEF over the past five years to strengthen its capacity to set national forestry policy and provide extension, regulation, and enforcement services in national parks, nature reserves, and gazetted forests. Forestry departments in developing countries face numerous impediments to becoming more effective, not the least of which are the rent-seeking opportunities their official mandate presents individual staff members. The temptations for underpaid civil servants to profit personally from their control over access to forest resources are myriad, whether fuelwood for local charcoal production or tropical hardwoods for industrial export. Corruption coupled with weak organizational capacity presents one of the most difficult institution-building challenges; this is a problem for donor-funded efforts in Madagascar (see Hobgood 1990). The Forest Management Project has experienced significant setbacks, culminating in a suspension of funding due to the lack of progress made in achieving project objectives. In the spring of 1993, a revised project was approved, and reactivation of funding is imminent.
4. In defense of their local demand-led approach, ANAE staff interviewed said that many Malagasy feel that international donors are more concerned about animals than people, and that intensifying effort near park reserves may be construed as another example of how the balance between conservation and development tilts in favor of conservation.
5. For an in-depth treatment of ONE and its role in the EAP see Talbott (1993).
6. ONE's internal structure and operations are still under debate. When the team asked a senior official at ONE for a copy of ONE's organization chart, he responded "which one would you like to see?" All of the organizational analyses conducted raised valid points regarding ONE's

problems in functioning effectively as a unit, and each of the organigrams proposed offered a reasonable technical solution to the problems identified (see Ballan 1992b, Goddard 1991, ONE 1992c and 1992d, RINDRA 1991, Talbott 1993). An ONE senior staff member conducted his own analysis of the technical pluses and minuses of the various proposals (Rakotovao 1992). What the organigram exercises could not deal with, however, were the ongoing internal and external political dynamics affecting ONE. In at least one case, the technical analysis was rejected because various parties suspected that it was being used for political purposes.

7. This is one of the conditionalities for USAID's Knowledge and Effective Policies for Environmental Management (KEPEM), and is a World Bank requirement for investment projects it finances.

8. See the series of analyses on governance, democracy, and decentralization conducted for USAID/Madagascar by Hobgood (1990, 1991, 1993).

9. EAP designers recognized that successful achievement of the plan's conservation objectives depends critically upon meshing them with socio-economic development incentives (see Hannah 1992). A major focus of ANGAP's and ANAE's efforts with ICDPs is the development of project selection and evaluation criteria that deal with the conservation-development linkages (see Barbour et al 1992).

10. One analytic perspective on implementation networks sees them as combining elements of markets and hierarchies (bureaucracies) in ways that seek to take advantage of the efficiencies each mechanism possesses while minimizing their weaknesses. Like a market, networks allocate goods and services production to various autonomous and semi-autonomous entities according to their relative production capacities. However, achieving a global objective calls for hierarchical structures containing interrelated subunits to establish targets, planning and resource utilization procedures, monitoring and evaluation systems, and oversight relationships, as in a bureaucracy (Gage and Mandell 1990). Introducing hierarchy into implementation seeks to take advantage of the ability of hierarchy to shape individual actors' preferences into patterns that are mutually consistent, something that a market does not do efficiently (Miller 1992).

**BIBLIOGRAPHY**

- African Development Fund (ADF). 1992. "Appraisal Report: Environmental Programme Phase I, Madagascar." Abidjan: African Development Bank. No. MAD/PASV/92/01.
- Andriamasy, M. and J. Rasolomandimby. 1991. "Rapport d'Enquête Socio-Economique pour la Préservation de la Réserve Naturelle Intégrale de Marojejy par le Développement Intégré." Antananarivo: SAF, Eglise du Jésus Christ à Madagascar, Département pour le Développement, October.
- Association Nationale pour la Gestion des Aires Protégées (ANGAP). 1992a. "Plan Triennal (1993-1995)." Antananarivo: Author, October.
- Association Nationale d'Actions Environnementales. 1992b. "Planification Triennale (1993-1995)." Antananarivo: Author, September.
- Ballan, Philippe. 1993. "L'Environnement en France: Historique et Etat des Lieux: Leçons à Tirer pour Madagascar." Antananarivo: Office National de l'Environnement and Projet PNUD/MAG/91/007, January.
- Ballan, Philippe. 1992a. "Commentaires sur l'Aide Mémoire de la Mission de Supervision de la Banque Mondiale du Projet PE1 en Juin 92." Antananarivo: Projet PNUD/DESD/MAG/91/007, August.
- Ballan, Philippe. 1992b. "Rapport sur l'Organisation Interne de l'ONE." Antananarivo: Projet PNUD/DESD/MAG/91/007, July.
- Barbour, Russell, Rene Rabezandria, Ray Daviesson, William Guyton, Nivo Rakotobe, Pepe Andrianomanana, Lala Ranajanhery, Paula Williams. 1992. "The Broken Forest: Applying the Integrated Conservation and Development Paradigm to Madagascar's Protected Areas." Washington, DC: Development Alternatives Inc. Report prepared for U.S. Agency for International Development, SAVEM Project, June, Volumes 1 and 2.
- Brandstetter, Robert H. and G. Edward Karch. 1992. "PVO-NGO/NRMS Project: Midterm Evaluation." Washington, DC: Chemonics. Report prepared for U.S. Agency for International Development.
- Brinkerhoff, Derick W. 1991. Improving Development Program Performance: Guidelines for Managers. Boulder, CO: Lynne Rienner Publishers.

- Brinkerhoff, Derick W., James D. Gage, and Jo Anne Yeager. 1992. Implementing Natural Resources Management Policy in Africa: a Document and Literature Review. Washington, DC: U.S. Agency for International Development, implementing Policy Change Project.
- Brinkerhoff, Derick W. and Marcus D. Ingle. 1989. "Between Blueprint and Process: a Structured Flexibility Approach to Development Management." Public Administration and Development, 9 (5): 487-503.
- Carroll, Thomas F. 1992. Intermediary NGOs: The Supporting Link in Grassroots Development. West Hartford, CT: Kumarian Press.
- Coopération Suisse. 1992. "Coopération Madagascar-Suisse dans le Secteur Environnemental." Antananarivo: Author.
- Chisholm, Donald. 1989. Coordination without Hierarchy: Informal Structures in Multiorganizational Systems. Berkeley: University of California Press.
- Christopherson, Kjell, Christine Brown, and Lisa Gaylord. n.d. "Enhancing the Effectiveness of Governmental and Nongovernmental Partnership in Natural Resources Management: Madagascar Case Study." Washington, DC: U.S. Agency for International Development, Bureau for Africa, Natural Resources Management Support Project, draft.
- Dorosh, Paul A., René E. Bernier, and Alexander H. Sarris. 1990. Macroeconomic Adjustment and the Poor: the Case of Madagascar. Ithaca, NY: Cornell University, Food and Nutrition Policy Program, Monograph No. 9, December.
- Falloux, François and Lee Talbot. 1992. Environnement et Développement: Crise et Opportunité. Paris: Editions G.-P. Maisonneuve and Larose.
- Falloux, François, Lee Talbot, and Jeri Larson. 1991. "Progress and Next Steps for National Environmental Action Plans in Africa." Washington, DC: World Bank, Africa Region, Technical Department, Environment Division, June.
- Furst, Michael J. 1993. "Developing an Institutional Framework for Effective Environmental Management, Policy Development and Program Implementation in Madagascar." Washington, DC: World Resources Institute, Policy Consultative Group, Trip Report, July.
- Gage, Robert W. and Myrna P. Mandell, eds. 1990. Strategies for Managing Intergovernmental Policies and Networks. New York: Praeger.
- Gaylord, Lisa, George Scharffenberger, and Chris Seubert. 1993. "SAVEM Grants Management Internal Assessment." Antananarivo: USAID/Madagascar, March.

- Goddard, Cathryn. 1991. "Office National de l'Environnement: Audit de l'Equipe Interne, Volume 1." Antananarivo: Coverdale Organisation, Inc. Report Prepared for the Ministry of the Economy and Planning, and UNDP, July.
- Government of Madagascar. 1990. "Charte de l'Environnement Malagasy." Antananarivo: Author.
- Hannah, Lee. 1992. African People, African Parks: An Evaluation of Development Initiatives as a Means of Improving Protected Area Conservation in Africa. Washington, DC: World Wildlife Fund, The Nature Conservancy, and World Resources Institute. Biodiversity Support Program.
- Hobgood, Harlan H. 1993. "Decentralization Assessment." Antananarivo: U.S. Agency for International Development, April, draft.
- Hobgood, Harlan H. 1991. "Governance and Democracy in the Republic of Madagascar." Antananarivo: U.S. Agency for International Development, June.
- Hobgood, Harlan H. 1990. "Governance in Madagascar: An Initial Assessment." Antananarivo: U.S. Agency for International Development, December.
- Honadle, George and Lauren Cooper. 1989. "Beyond Coordination and Control: An Interorganizational Approach to Structural Adjustment, Service Delivery, and Natural Resource Management." World Development. Vol. 17, No. 10, pp. 1531-1541.
- Honadle, George and Jerry VanSant. 1985. Implementation for Sustainability: Lessons from Integrated Rural Development. West Hartford, CT: Kumarian.
- Klauss, Rudi. 1979. "Interorganizational Relationships for Project Implementation." In George Honadle and Rudi Klauss, eds. International Development Administration: Implementation Analysis for Development Projects. New York: Praeger Publishers, pp. 146-167.
- Larson, Bruce A. 1993. "Changing the Economics of Environmental Degradation in Madagascar: Lessons from the National Environmental Action Plan Process." Washington, DC: U.S. Agency for International Development, Environmental Planning, Analysis, and Training Project.
- Mazamarian, Daniel A. and Paul A. Sabatier. 1989. Implementation and Public Policy. Lanham, MD: University Press of America.

- McNeely, Jeffrey A., Kenton R. Miller, Walter V. Reid, Russell A. Mittermeier, and Timothy B. Werner. 1990. Conserving the World's Biological Diversity. Gland, Switzerland and Washington, DC: International Union for Conservation of Nature and Natural Resources and World Bank, with World Resources Institute, Conservation International, and World Wildlife Fund-US.
- McQuillan, D. Aidan. 1988. "Tourism Development and the Environmental Action Plan for Madagascar." Washington, DC: World Resources Institute. Report prepared for U.S. Agency for International Development, April.
- Mercier, Jean-Roger. 1990. "The National Environmental Action Plan Process: Madagascar. Country Reflective Work." Washington, DC: World Bank. Paper prepared for the Workshop on African Environmental Action Plans, 12-14 December, Dublin, Ireland.
- Miller, Gary J. 1992. Managerial Dilemmas: The Political Economy of Hierarchy. Cambridge: Cambridge University Press.
- O'Conner, Sheila. 1990. "Madagascar: Beza Mahafaly and Andohahela." In Agnes Kiss, ed. Living with Wildlife: Wildlife Resource Management with Local Participation in Africa. Washington, DC: World Bank, AFTEN Technical Paper No. 130, pp. 41-51.
- Office National de l'Environnement (ONE). 1992a. "Développement des Termes de Référence des Etudes d'Evaluation pour la Revue à Mi-parcours du Programme Environnemental Un (PE1)." Antananarivo: Author. November.
- Office National de l'Environnement. 1992b. "Plan d'Action Environnemental PAE: Plan Triennal 1993-1995." Antananarivo: Author. Doc. COS No. 3/92, December.
- Office National de l'Environnement. 1992c. "Plan d'Action Environnemental PAE: Termes de Référence du Personnel-Cadre et Organigramme de l'ONE." Antananarivo: Author. Doc. COS No. 5/92, December.
- Office National de l'Environnement. 1992d. "Rapport Préliminaire sur l'Organisation de l'ONE et son Action dans la Coordination et le Suivi du Projet." Antananarivo: Author.
- Office National de l'Environnement. 1992e. "Règlement Général du Personnel ONE." Antananarivo: Author. July.
- Opsal, Knut and Kirk Talbott. 1990. The Implementation of the Madagascar Environmental Action Plan: Possibilities and Constraints for Local Participation. Washington, DC: World Bank, Africa Region, Technical Department, Environment Division, AFTEN Technical Note No. 9, September.
- Peters, Joe. 1992. "Ecotourism Development in Protected Areas in Madagascar." Antananarivo: Tropical Research and Development. Report prepared for ANGAP, No. 687-0110, November.

- Pryor, Frederic L. 1990. The Political Economy of Poverty, Equity, and Growth: Malawi and Madagascar. New York: Oxford University Press, for the World Bank.
- Rabefaritra, Andrianjatiana et al. n.d. "Contribution à l'Amélioration de la Stratégie Nationale de Lutte contre les Feux de Végétation à Madagascar: Quelques Eléments de Réflexion." Antananarivo: Office National de l'Environnement.
- Rakotovao, Solohery. 1992. "Commentaires et Propositions sur le Projet d'Organigramme de l'ONE." Antananarivo: Office National de l'Environnement, January.
- Ralimanga, Viviane. 1992a. "Plan d'Action Environnemental, Programme Environnement 1: Rapport d'Activités." Antananarivo: Office National de l'Environnement, June.
- Ralimanga, Viviane. 1992b. "Plan d'Action Environnemental, Programme Environnement 1: Rapport d'Activités." Antananarivo: Office National de l'Environnement, July
- Ramahatra, Roland. 1991. "Ethique en Affaires Environnementales: Relations entre la Sphère de Décision et la Sphère d'Exécution." Tamatave: Paper prepared for annual meeting of the Comité d'Orientation et de Suivi, Office National de l'Environnement.
- RINDRA. 1991. "Office National de l'Environnement: La Structure d'Organisation." Antananarivo: Author, March.
- Rothchild, Donald and Naomi Chazan, eds. 1988. The Precarious Balance: State and Society in Africa. Boulder, CO: Westview Press.
- Talbot, Lee M. 1990. "Institutional Framework for the Development and Implementation of National Environmental Action Plans." In World Bank. National Environmental Action Plans in Africa. Washington, DC: Author, Proceedings from a Workshop organized by the Government of Ireland, the Environmental Institute, University College, Dublin, and the World Bank. Dublin, Ireland, December 12-14, pp. 49-53.
- Talbott, Kirk. 1993. "Elusive Success. Institutional Priorities and the Role of Coordination: A Case Study of the Madagascar National Environmental Action Plan." Washington, DC: World Resources Institute, Issues in Development Series, May.
- Talbott, Kirk. 1990. "Public Participation in African Environmental Action Plans." In World Bank. National Environmental Action Plans in Africa. Washington, DC: Author, Proceedings from a Workshop organized by the Government of Ireland, the Environmental Institute, University College, Dublin, and the World Bank. Dublin, Ireland, December 12-14, pp. 37-47.

- Talbott, Kirk and Michael Furst. 1991. "Ensuring Accountability: Monitoring and Evaluating the Preparation of Environmental Action Plans in Africa." In World Bank. Issues Facing National Environmental Action Plans in Africa. Report from a Club of Dublin Workshop, Mauritius, June 17-19. Washington, DC: Author, pp.45-59.
- United Nations Development Program (UNDP). 1991. "Assistance à l'Office National de l'Environnement et à la Promotion d'Etudes Environnementales." Antananarivo: Author. Project No. MAG/91/007, June.
- U.S. Agency for International Development. 1992. "Madagascar: Country Program Strategic Plan 1993-98." Antananarivo: Author, August.
- U.S. Agency for International Development. 1990a. "Madagascar Knowledge and Effective Application of Policies for Environmental Management (687-0113)." Antananarivo: Author, Program Assistance Identification Document, December.
- U.S. Agency for International Development. 1990b. "Sustainable Approaches to Viable Environmental Management (687-0110)." Antananarivo: Author, Project Paper, August.
- U.S. Agency for International Development. n.d. "USAID/Madagascar Environment Program." Antananarivo: Author.
- Verin, Pierre. 1992. "Socio-Economic Factors in Economic Development in Madagascar." Antananarivo: U.S. Agency for International Development, March.
- World Bank. 1991. Issues Facing National Environmental Action Plans in Africa. Report from a Club of Dublin Workshop, Mauritius, June 17-19. Washington, DC: Author.
- World Bank. 1990a. "Democratic Republic of Madagascar Environment Program." Washington, DC: Author. Staff Appraisal Report, No. 8348-MAG, February.
- World Bank. 1990b. "Development Credit Agreement (Environment Project) between Democratic Republic of Madagascar and International Development Association." Washington, DC: Author, Credit No. 2125 MAG, May.
- World Bank. 1990c. National Environmental Action Plans in Africa. Washington, DC: Author, Proceedings from a Workshop organized by the Government of Ireland, the Environmental Institute, University College, Dublin, and the World Bank. Dublin, Ireland, December 12-14.
- Zimmerman, Robert C. 1992. "Recent Reforms in Natural Resources Management in Africa: Convergence Towards and Divergence From a Model Role for Public-Sector Institutions." Washington, DC: U.S. Agency for International Development, Bureau for Africa, Forestry Support Program, June.

**Annex A****Madagascar's Recent Political Context:  
Impacts on EAP Implementation**

by

**Pépé Andrianomanana**

The past five years have been ones of political crisis in Madagascar. That crisis has links to the country's larger socio-economic plight where poverty levels have increased considerably, and along with it, popular dissatisfaction with the government's failed development strategy. Also at the core of the political turmoil, however, is the widespread demand for rejection of the 1975 constitution in favor of a search for a democratic, pluralist form of government. This annex presents some of the key features of the years 1989-1993 and their impacts on EAP implementation.

**1989:**

The year 1989 saw elections at many levels: presidential, national legislative, regional, and municipal. Campaign themes focused on constitutional issues, as well as certain institutional factors. These included:

- The need to revise the 1975 constitution and the "Charte de la Révolution Socialiste." Both of these had been essentially nullified by the economic policies and procedures put in place as part of Madagascar's structural adjustment program.
- Demands for political pluralism, specifically, for opening up the political playing field beyond the structure provided by the "Front National pour la Défense de la Révolution" (FNDR).
- Calls for the elimination of press censorship.

Election results gave victory to the dominant political party, AREMA. President Didier Ratsiraka was re-elected with 63 percent of the vote in March, and AREMA maintained its majority in the National Assembly after the legislature elections in May. Electoral defeat of the opposition, however, did not stop the movement for change. As of April 1989, the opposition parties organized themselves into a coalition, the "Alliance Démocratique Malgache" (ADM). In December, the government issued a decree authorizing the formation of political parties outside the FNDR.

**1990:**

The ongoing sociopolitical crisis was punctuated in 1990 by a one-day takeover of the national radio station on May 13th, the anniversary of socialist revolution. This year also witnessed the increasing activity of church groups in calling for change. The Ecumenical Federation of Churches (FFKM) organized two national meetings, the "Concertations nationales," one August 16-19, and the other December 15-18. The FFKM is made up of the Reformed Church (FJKM), the Catholic Church (ECAR), the Lutherans (FLM), and the Anglicans.

The resolutions emerging from the deliberations of the two national meetings reflected the popular preoccupations of the moment, namely, calls to address poverty issues more effectively and to revise the constitution. More importantly, they gave rise to the formation of a new organization called "Les Forces Vives." This entity was structured with three departments, of which the Political Department assumed leadership of opposition activities.

**1991:**

The May 1st rally organized by "Les Forces Vives" marked an escalation of the popular movement for change. A month later, on June 10th, 300,000 demonstrators marched in the streets of the capital demanding the abolition of the 1975 constitution. Two weeks later on June 26th, "Les Forces Vives" organized a counter-celebration to the official festivities for independence day, the "Fête Nationale." The official celebration took place in Mahamasina, the "Forces Vives" event occupied the Square of May 13th.

A tripartite meeting on July 3rd of the coalition of supporters of President Ratsiraka (MMSM), the FFKM, and the "Forces Vives" sought to reach a compromise to avoid further mass demonstrations and a threatened strike. The opposition members were in no mood for compromise and the meeting failed to produce a satisfactory solution. On July 8th, a general strike was called, and 400,000 people demonstrated against the government in the Square of May 13th. The opposition groups declared themselves a counter-government, the "Gouvernement des Forces Vives." The strike spread rapidly, affecting all sectors. The government was essentially paralyzed.

This led the president to dissolve the government of Prime Minister Ramahatra on July 28th, and on August 8th to name Guy Razanamasy as the new Prime Minister, and charged him with organizing new elections. This initiative did not satisfy the "Forces Vives," who organized a protest march on the presidential palace two days later. The marchers were fired upon, and some were killed. The "massacre" pushed the "Forces Vives" to demand the immediate resignation of President Ratsiraka.

The situation remained a stalemate until a meeting in October among the MMSM, the FFKM, and the "Forces Vives" produced a transition plan to a new government acceptable to all parties. The convention was signed on October 31st. This agreement established four institutional structures:

- **The Government:** This entity was accorded executive and legislative powers, and was authorized to govern by issuing decrees and administrative orders. Razanamasy was confirmed as Prime Minister at its head.
- **The High State Authority (HAE):** This body ratified all decrees and administrative orders issued by the government. Albert Zafy was named as its president.
- **The Presidency of the Republic:** Ratsiraka remained in the position, stripped of all but symbolic powers.
- **The Committee for Economic and Social Reform (CRES):** This body served as a forum for reflection and discussion, and was made up of 130 members.

The October convention paved the way for the formation of an interim Government of Consensus to lead the transition to democracy. To accommodate representation of each of the major political groupings, the Government structure had 36 members, not counting the Prime Minister.

The signing of the convention did not signal an end to the public sector strike, however. The administrative functions of government did not fully resume until February of 1992.

#### **1992:**

A National Forum was assigned responsibility for drafting a new constitution. To obtain input for the draft document, the group organized regional fora in 112 "fivondronana," which are municipal level government jurisdictions, during the month of February. At the end of March a national level meeting on the terms of the new constitution was held. Essentially, the draft constitution adopted a parliamentary system over a strong presidential system. Executive powers are shared between a prime minister and a president. The president, who has relatively limited powers, is to be elected by a popular majority, and his stay in office is restricted to two five-year terms. The prime minister is chosen by the national assembly. Legislative power is assigned to a national assembly and a senate. Deputies are elected according to proportional representation. Judicial power resides in a supreme court, an appeals court, and a system of tribunals.

The draft constitution was adopted by referendum on August 19th, and plans for a new election were launched. Eight candidates ran for president in the first round, with votes cast on November 25th. Albert Zafy, with 45 percent of the vote, and Didier Ratsiraka, with 25 percent, emerged as first and second place winners.

#### **1993:**

The second round of presidential elections was held on February 10th. Zafy was victorious, becoming the first president of Madagascar's Third Republic. Legislative elections for candidates for the national assembly are scheduled for June 16th.

**Impacts on Implementation of the Environmental Action Plan:**

The impacts of the political events described above on the EAP resulted from three factors: the administrative and economic paralysis brought on by the strike, a "wait-and-see" posture on the part of donor agencies, and changes in the government's structure.

1. **The strike:** As noted above, the strike did not end with the October 31, 1991 convention setting in place a consensus transition government, but extended until February of the next year. Effectively, government functioning was paralyzed for eight months. This paralysis introduced major delays in putting in place the institutional structures for managing the EAP, most notably ONE. Officially created in December 1990, ONE did not have an approved organizational structure until October 1992, and staff recruitments were postponed until April 1993. The strike also contributed to difficulties in convening meetings of ONE's board of directors and the COS.

Other public sector agencies with a role in the EAP were affected. They rely on the administration for a variety of complementary activities: such as processing of project and personnel dossiers, allocation of counterpart funds, etc. Regarding counterpart funds, the official budget law for 1992, for example, was not ratified until July of that year, which caused budget problems for many agencies. Another complicating factor was the irregular availability of gasoline, which impeded operations as well.

2. **The donors:** For donor agencies, the political events often meant an absence of official interlocutors for significant periods of time. And once dialogue was established and decisions were made, the administrative problems meant that actions were delayed. Donor agencies responded by increasing the number of supervisory missions and evaluations to investigate the situation.

3. **Changing government structures:** Central here was the reassignment of ONE from the Ministry of Economy and Plan to the State Ministry of Agriculture. In addition, within the latter, a Commissariat for the Environment was created. Also, the transition government divided many existing departments into two or more new entities. For example, the former agriculture department was split into the Ministry of Agriculture, the Ministry of Animal Husbandry and Fisheries, and the Ministry of Water and Forests and the Environment. The old industry department became the Ministry of Industry and Crafts, and the Ministry of Energy and Mines. This multiplication of ministries made the tasks of EAP coordination and collaboration more difficult.

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