Implementing Environmental Policies in Developing Countries: Responding to the Environmental Impacts of Tourism Development by Creating Environmentally Protected Areas in Bahia, Brazil

by

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ABSTRACT

Governments have two apparently conflicting roles to play: promoter of economic development and protector of environmental quality. Economic development interests tend to have priority on most government agenda in developing countries, creating obstacles to the implementation of environmental protection policies. This trend can be reversed by introducing environmental protection concerns into the mainstream development agenda by decentralizing environmental policy implementation to development-oriented agencies.

Government agencies often fail to implement environmental policies mainly because they lack political support, they have insufficient financial resources, they have not developed adequate institutional capacity, and they tend to overlook the importance of cooperation at the local level. However, the Bahia State government in Northeast Brazil was able to overcome all four of these obstacles in establishing environmentally protected areas (APAs) by introducing them into the mainstream development agenda, which was chiefly oriented toward tourism development. At the state level, a large number of APAs were created, primarily as the result of the decentralization of administrative authority among several state agencies, including development-oriented agencies linked to tourism development. This decentralization generated an apparently unintentional system of incentives for state agencies to implement APAs. The increased inter-agency competition for political control of protected areas improved the institutional capacity of each agency, and generated funds and political support at the state and local levels for APA implementation, overcoming the four obstacles. State agencies' actions were supervised by an independent oversight body, the state environmental council (CEPRAM), which had the power to interfere in the establishment of APAs and block development projects related to them.

At the local level, seven case studies show that the involvement of state development agencies, and the local expectation of economic benefits from tourism, were important factors in preventing the usual local resistance to the establishment of APAs. In this context, three points determined the intensity of local political, financial, and institutional support for enforcing APA guidelines. First, APAs created as means of curbing already existent environmental problems caused by tourism or urban development mustered more local support than APAs created as environmental safeguards for public infrastructure projects.
Second, APAs contained within a single municipality received more local support than APAs involving multiple municipalities. Third, the involvement of local actors at the early stages of the APA creation fostered local support for enforcement. From the lessons at the story at the state level, additional incentives to local institutions by a central authority linked to a politically independent system of checks-and-balances might improve implementation at the local level.

The decentralization of environmental policy implementation to a range of development agencies can be an alternative to mainstreaming environmental concerns in the development agenda and achieving environmental protection goals. However, to make decentralization work, as my study in Bahia showed, central authorities should offer institutional incentives to decentralized agencies to ensure increased attention to environmental protection objectives in the development process; and at the same time, an independent body with oversight authority for both developmental and environmental actions should be in place to prevent development agencies from neglecting environmental concerns.

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LIST OF ACRONYMS

- APA – Environmentally Protected Area (Área de Proteção Ambiental)
- Bahiaturua – Bahia Tourism Authority (Bahia Turismo S.A.)
- CEPRAM – State Environmental Council (Conselho Estadual de Meio Ambiente)
- Conama – National Environmental Council (Conselho Nacional de Meio Ambiente)
- Conder – Company for the Development of the Metropolitan Region (Companhia de Desenvolvimento da Região Metropolitana)
- CRA – Bahia State Environmental Agency (Centro de Recursos Ambientais)
- Embratur – Brazilian Tourism Authority (Empresa Brasileira de Turismo)
- IBAMA – Federal Environmental Agency (Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis)
- IDB – Interamerican Development Bank
- MMA – Ministry of the Environment (Ministro do Meio Ambiente, Recursos Hídricos e da Amazônia Legal)
- NGO – Nongovernmental Organization
- ODA – Overseas Development Agency
- Prodetur – Tourism Development Program (Programa de Desenvolvimento do Turismo)
- Sectur – State Secretariat of Culture and Tourism (Secretaria de Cultura e Turismo)
- SEPLANTEC – State Secretariat of Planing, Science and Technology (Secretaria de Planejamento, Ciência e Tecnologia)
CHAPTER 1 - INTRODUCTION

This thesis is about implementation of environmental policy in developing countries. It tries to understand the main institutional obstacles to effective implementation and possible ways to overcome them. At the core of this research is a debate about the role of government.

One key question concerns the role of government in trying to foster both economic development and environmental protection. Environmental problems in developing countries stem from both economic development and the lack of it. The modern, affluent segment of developing countries consumes large amounts of energy and natural resources and produces waste at a rate similar to that of developed countries. As countries achieve rapid economic growth, these problems tend to intensify. In contrast, widespread poverty causes other kinds of environmental problems, such as deforestation due to unsustainable slash-and-burn agriculture.

Thus environmental protection and economic development are linked, but not linearly. More economic development does not necessarily mean more environmental impacts of all kinds, and less economic development does not necessarily mean that there will be no environmental impact. In this context, government has a dual mandate. On the one hand, governments are in charge of designing policies to spur economic development. On the other hand, government is responsible for protecting the environment in most countries, and the way they foster economic development can help or hurt. Nowadays, any development action has an environmental impact, and vice-versa, and these roles often conflict. This thesis attempts to analyze the conditions under which these mandates can be compatible.

In developing countries, rapid economic development is often the highest government priority. Pressured by low incomes, governments create different kinds of policies to foster economic growth. As a result, development-oriented agencies tend to be politically influential and powerful. They usually receive large amounts of funding to perform their tasks compared with non-development agencies. Environmental agencies and issues, in contrast, often obtain little funding because they are not a political priority, or because they involve highly politicized actions, such as expropriating land or restricting development. The puzzle in this research is to understand under what conditions and under what institutional arrangement governments tend to prioritize environmental concerns in their development agenda.

Another question is which institutional arrangement governments can use to implement environmental policies effectively. In the past, policies pursued under highly centralized governments often resulted in failures. Decentralization showed promise as a way to increase governments’ efficiency and accountability. However, the literature has tended to look at how to decentralize government, instead of examining whether decentralized governments implement policies effectively. This research focuses on how environmental policies are implemented in a decentralized manner, through decentralization at the same governmental level and devolution to lower governmental levels.
1.1) The Case Study

As in many parts of the developing world, local and state governments in Northeastern Brazil\(^1\) – the most economically disadvantaged section of the country (see Appendix 1) – are looking to spur rapid economic development. Since the end of the 1980s, this region has adopted tourism as one of its top economic development strategies. Federal, state, and local governments have invested several million dollars in tourism infrastructure and expect this investment to be matched by considerable investment from the private sector. Governments in Bahia, the largest of Northeast’s nine states (Figure 1.1), invested heavily in tourism-related projects in the 1990s (Bahia State Government, n.d.).

Tourists come to the Bahian coast searching for scenic beaches and dunes and tropical settings framed by coconut trees and typical villages. Together with the region’s cultural richness, coastal destinations are some of the most important tourist attractions in Bahia. On the other hand, tourism has exerted a series of negative impacts on the natural environment. These are likely to hinder tourist activity itself and hurt the region’s economy if they are not managed well. Therefore, to be successful, tourism-related activity in a region like the Bahian coast depends on preservation of the area’s natural resources. Local and state governments in Bahia have responded to internal and external pressures to increase environmental protection while encouraging tourism to expand. To fulfill this dual mandate, the state government of Bahia created a significant number of environmentally protected areas (APAs\(^2\)) in the 1990s—one type of protected area. Between 1992 and 1998, the number of APAs increased by 1,200 percent, and their area multiplied by 130 (CRA, 1998).

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\(^{1}\) From now on, I refer to Northeast Brazil as Northeast solely.

\(^{2}\) APA = Área de Proteção Ambiental, in Portuguese. The term APA (environmentally protected area, or Área de Proteção Ambiental) was created in law 6,902 in 1981, and also included in the legislative National Environmental Policy of 1981 (see Appendix 5 for the APA legislation). The National Environmental Council defines APAs as “areas destined to preserve the environmental quality and natural resources in a certain region in order to improve the quality of life of the local population and to protect regional ecosystems” (resolution number 10, 1988, first article). An APA has a special zoning system that defines areas for preservation, tourism development, and other activities. The objective of APAs is to avoid the uncontrolled development of tourism and other economic activities. The zoning is supposedly planned with input from local communities and governments.
Basic Data on Bahia State

<table>
<thead>
<tr>
<th>Data Point</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>12,276,000 inhabitants (1994)</td>
</tr>
<tr>
<td>Capital</td>
<td>Salvador (2,056,013 inhabitants in 1991)</td>
</tr>
<tr>
<td>Area</td>
<td>561,026 km² (216,613 square miles)</td>
</tr>
<tr>
<td>Number of municipalities</td>
<td>415</td>
</tr>
<tr>
<td>Coast</td>
<td>1,180 km</td>
</tr>
</tbody>
</table>


FIGURE 1.1 – THE BRAZILIAN NORTHEAST AND BAHIA (SUDENE, 1999)

APAs transfer certain development rights from private landowners and municipal governments to a group of actors composed of state and municipal governments as well as members of the local civil society, according to plans coordinated by state agencies. APAs permit the state government and civil society to interfere in matters usually handled by municipal governments, which are responsible for land-use planning. However, unlike areas under stricter conservation guidelines, such as state and national parks, no land expropriation is necessary to create an APA. This means that the financial burden of buying land is avoided, as are possible conflicts with private landowners.

Especially in the 1990s, the creation of APAs became very common. One push for the creation of such areas was the environmental protection demands of federal and multilateral
banks (such as the Bank of the Northeast\(^3\) and the Inter-American Development Bank). For state agencies to obtain large loans from these banks for investment in infrastructure for tourism, the agencies had to comply with environmental requirements.\(^4\) Local governments, developers, and landowners eager to attract private tourism-related investment did not oppose the loss of some of their unfettered development rights, as they saw APAs as protecting their investments. Environmental groups also increasingly influenced public policymaking around the same time, because of the country's democratization process.

In this study, I examine the creation of APAs and the extent to which the government of Bahia was able to overcome the political, institutional, and financial obstacles to establishing and managing them. My research questions include:

(i) How and why did governments in Bahia adopt APAs as a tool for environmental management?

(ii) What institutional conditions led to the successful creation of APAs at the state level?

(iii) What local conditions led to enforcement of APA guidelines at the local level?

This study used a combination of quantitative data and qualitative data drawn from semi-structured interviews with government officials at the state and local level, members of local populations, members of non-governmental organizations (NGOs), academics, and developers (see Appendix 2 for more details on the methodology and structure of the data collection). As it turned out, I needed to make sense of two stories that take place at different levels. The first is a story that unfolds at the state level. I pieced together most of this story by talking to officials in the state capital, Salvador. This story explains how different policy actors interacted to overcome the usual barriers to establishing protected areas. The second story is set at the local level. I use seven in-depth case studies of APAs on the Bahian coast to understand how and why local actors responded to proposals to create protected areas in their vicinity, and to assess whether and why local actors provided institutional, financial, and institutional resources for enforcing APA guidelines. These cases complement the story at the state level, and help explain under what conditions APA guidelines were enforced.

1.2) Arguments in Brief

Tourism has become an important economic activity in many parts of the world (WTO, 1991). Improvements in transportation and increasing incomes and vacation time have allowed more people to travel more often to more distant places (Tyler, 1989). Today, most

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\(^3\) Bank of the Northeast (Banco do Nordeste) is a government development bank that finances public- and private-sector development projects in the Brazilian Northeast and northern regions of the states of Minas Gerais and Espirito Santo. The bank's headquarters are in Fortaleza (Ceara State), but it maintains branches all over the region.

\(^4\) Most of the financing comes from Prodetur, a plan to develop tourism in the Northeast of Brazil through investments totaling over US$ 1.6 billion in the next 10 years. This plan is coordinated by Banco do Nordeste and state governments with loans from the Inter-American Development Bank.
parts of the world can be readily reached. One important feature of modern tourism is the
growing number of tourists looking to enjoy the wonderment of nature. Indeed, nature-based
tourism has become quite popular (Boo, 1991). This kind of tourism offers an appealing form
of economic activity, especially for developing countries rich in environmental resources.
However, the quick disappearance of the natural environment owing to unrestrained
development – some of which is due to tourism itself – poses a threat to the sustainability of
such activity in places that have just begun to enjoy its benefits.

Government-managed protected areas have therefore emerged as one of the main
types of tourist destinations. Besides promoting them as tourist attractions, many
governments have relied on protected areas to control land development and preserve rare
fauna and flora. In some developing countries, however, public agencies have had difficulty
establishing and managing significant numbers of protected areas. This is partly because they
lack many of the financial, institutional, and political resources needed to create and maintain
them and fend off powerful development interests. Still, some governments have been able to
create and manage protected areas.

This study examines why and how some governments have supported protected-area
policies and have been able to overcome the political, institutional, and financial obstacles to
establishing and maintaining them. I am particularly interested in understanding how the rise
of the environmental movement and growing international interest in nature-based tourism
can stimulate the creation and effective management of protected areas in developing
countries.

In this thesis, I develop an analytical framework for understanding the obstacles to
establishing protected areas (see Chapter 3). Based on the literature of protected-area policy
and management, I identify four main obstacles to the creation and management of protected
areas: lack of political support, lack of financial resources, lack of institutional capacity, and
lack of cooperation from local actors. In my case study in Bahia, Brazil, I use this analytical
framework to understand, at both state and local levels, why and to what extent governments
were capable of overcoming these obstacles to create and manage a considerable number of
protected areas. This research adds to the scarce literature on protected areas in developing
countries. That literature mostly provides normative recommendations or descriptive
analyses (Ceballos-Lascurain, 1996; McNeely, 1993) of protected areas. Few publications are
based on empirical research to understand how protected areas are established and managed
in the field.

Decentralization of decision making turns out to be key to both stories. Had Bahia state
government not allocated responsibility for creating and administering APAs to a variety of
state and local agencies, it would not have been possible to create such a large number of
APAs. Instead of centralizing power in the hands of a single state environmental agency
(CRA), the government allowed other state agencies to initiate APAs on their own –
especially the State Secretariat of Culture and Tourism (Sectur) and Company for the
Development of the Metropolitan Region (Companhia de Desenvolvimento da Região
Metropolitana – Conder).
Overall, the effects of decentralization were fourfold, tackling the four obstacles to establishing protected areas examined in the analytical framework in Chapter 3. First, political support for creating APAs grew as development agencies promoted APA policy instead of blocking it. Second, state-level decentralization attracted more funds for environmental protection from alternative sources. For example, Sectur allocated part of its tourism development budget for APA activities under its administration. Third, the involvement of several agencies sparked a competition to create and establish the institutional structure to administer APAs, since in so doing the agencies could enhance their political power and financial resources. Fourth, the participation of development agencies in this endeavor eased the resistance of local governments to state interference in land-use planning, constitutionally interpreted as a responsibility of local governments. Local governments were eager to attract investment in infrastructure, and the involvement of development agencies in APAs raised local expectations of state financial support.

In the story at the local level, state agencies counted on local institutions to participate in enforcing APA guidelines. However, such local support produced different outcomes in the different case studies. Of my seven case studies, one (Guaibim APA) offered the best example of a local structure for ensuring the enforcement of APA guidelines. This APA was created to control the impacts of a proposed tourist resort. State officials were flexible and agreed to negotiate the conditions of the development project. Instead of simply denying the construction permit to developers, state officials negotiated project changes to ensure that the project complied with environmental goals. This negotiation convinced developers and local actors to support APA guidelines.

State and municipal officials then used the APA to enforce the negotiated agreement and protect the larger area. In Guaibim, local actors who were involved in the policy process from its early stages perceived themselves as benefitting from APA creation. Municipal authorities supported the creation and the enforcement of APA guidelines through municipal laws and enforcement structures because they expected resources from the state and helped elaborate the land-use rules. The fact that only one municipality was involved, together with the relative small size of the APA (2,000 ha) and number of landholders, facilitated the strong support of local actors in enforcing APA guidelines.

From the analysis of my seven case studies, three factors emerged to explain local participation in enforcing APA guidelines: the objectives of the APAs, the number of municipalities involved, and the early involvement of local actors. First, APAs created in areas already under tourism development pressure generated more local support for enforcement than APAs created to head off the impacts of development projects. Second, APAs involving only one municipality were likely to gain more local support for enforcement. The involvement of several municipalities in one APA made it difficult for state agencies to coordinate their efforts to build local capacity for APA enforcement. Finally, the early involvement of local actors in establishing APAs helped inform them about the benefits of protected areas, thus fostering local political and institutional support for enforcement.
In summary, to become a governmental priority in developing countries, strategies for environmental protection must be reconciled with economic development. Institutions in charge of development should be able to undertake initiatives in environmental protection. Innovative institutional arrangements must be in place to balance the sometimes-conflicting objectives of development and environmental protection. Decentralization seems to be an alternative form of institutional arrangement. However, decentralization should not be conceived as simply a hand-over of responsibility and power to decentralized organizations. Central institutions must play a crucial role before, during, and after the decentralization process.

Two factors were important in explaining why decentralization at the state level enabled Bahia to achieve a certain degree of success in establishing APAs. First, although apparently unintentional, decentralization created a system of institutional incentives motivating development agencies to establish APAs. Protected areas were compatible with their development agenda based on nature-based tourism. Second, a system of checks and balances provided oversight for the whole process of development and environmental protection. Both APAs and development projects needed the approval not only of the state environmental agency (CRA) but also of the state environmental council (CEPRAM), one-third of whose members were from environmental groups. These two factors were missing to some extent from the efforts of local actors to enforce APA guidelines.

1.3) Layout of the Following Chapters

Chapter 2 examines the relevant literature to understand the role of government in implementing environmental policies in developing countries. It starts with a debate concerning the dual mandate of governments: economic development and environmental protection. The chapter then introduces debates in the literature concerning institutional arrangements that enable governments to work more effectively. Finally, the main obstacles to implementing environmental policies in developing countries are identified.

Chapter 3 focuses on one of the main environmental management tools that governments can use to minimize the impacts of tourism development: protected areas. I describe the history of the different kinds of protected areas around the world. I also summarize the primary costs and benefits of establishing protected areas and how they are divided among stakeholders. Later, I identify the four main obstacles to implementing protected-area policy, particularly in developing countries. I then develop an analytical framework based on these four obstacles to apply to the Bahian case studies.

Chapter 4 sets out the general background for understanding the situation in Bahia. It describes the evolution of environmental legislation and governmental institutions in Brazil and Bahia, especially over the last four decades. This chapter analyzes the different kinds of protected areas that have been created in Brazil. I explain how and why environmentally protected areas (APAs) have been established in Bahia, detailing the process of their creation and showing the increase in their number and surface area in the 1990s.

The next two chapters, Chapter 5 and Chapter 6, analyze the stories of the establishment of environmentally protected areas (APAs) in Bahia based on the analytical framework.
developed in Chapter 3. Chapter 5 examines the story of APAs at the state level. It looks how the state of Bahia was able to establish a significant number of APAs in areas with tourism potential in the 1990s by decentralizing APA policy to several state agencies. The involvement of various state agencies prompted them to increase their institutional capacity to handle this responsibility, and attracted funding and political support to both state and local levels. Chapter 6 studies the story of APAs at the local level. It describes in detail the seven local case studies and analyzes the role of different stakeholders in each case, including state government, local governments, NGOs, and the local population. I analyze these cases, particularly the Guaibim APA case, to draw lessons for effective implementation of APAs at the local level. Finally, in Chapter 7, I summarize these results and frame more generally my contributions to planning and policy implementation.
CHAPTER 2 - IMPLEMENTING ENVIRONMENTAL POLICIES IN DEVELOPING COUNTRIES

2.1.) The dual mandate of governments

Governments have a dual mandate in steering development. On the one hand, the low incomes and high poverty levels in many developing countries make economic development an important government objective. Government responsibilities include attracting private investment and spurring economic growth. Powerful ministries and agencies play a key role in determining interventions that shape economic development, including providing infrastructure, economic incentives, laws and the tax system. And creating policies, programs, and projects to pursue those priorities. On the other hand, governments are also responsible for environmental policy. One or several governmental agencies are expected to perform several actions in this arena, such as enacting and enforcing environmental laws, providing economic incentives for environmental initiatives, and controlling urban and land use planning.

These two government mandates - economic development and environmental protection - can be perceived as conflicting. Economic development can cause environmental degradation, and environmental protection can restrict economic development. Government agencies that oversee the two mandates, supported by allies in the private and non-governmental sector, can disagree over government action and clash in their attempts to gain political and institutional support.

Despite the increasing political support environmental issues have gained since the United Nations conference on the environment in Stockholm in 1972, the governments of many developing countries still perceive environmental protection as an obstacle to economic development. For example, in his study of several Caribbean countries, Gamman (1995) found in many cases that governments overturned environmental initiatives to support development projects. Influential private interests could convince government officials to approve their projects despite concerns raised by environmental groups outside and inside the government.

What’s more, while development agencies tend to maintain strong political connections and receive significant institutional and financial resources, environmental agencies often have few resources and little political clout. This is the case in several Eastern European countries. During the communist era environmental agencies had little influence in party politics and their officials could not promote many environmental initiatives (Klarer & Francis, 1997). Even with the collapse of communist regimes, environmental agencies remain in a fragile institutional position compared with development agencies. Economic recovery and attaining parity with Western Europe are the priorities.

The idea that governments could play a major role in environmental protection took hold in the 1960s and 1970s with growing pressure from environmental groups, first in industrialized countries and then in the developing world. At that time, economic
development appeared to be one of the main villains of environmental quality. Theories promoting zero economic growth and highlighting the incompatibility of economic development and environmental protection were common. Facing public outcry, governments introduced new environmental laws and policies and created specialized agencies to implement them. These agencies, which often acted by policing and penalizing environmental offenders, were frequently blamed for blocking economic development and interfering with privacy and private property rights.

However, in the 1980s the concept of sustainable development challenged the idea that environmental protection and economic development were incompatible. This concept holds that economic development and environmental protection go hand in hand, and governmental and private development actors began to think about how to integrate both objectives. Since then, numerous policies, procedures, and projects have focused on sustainable development. However, although today it is difficult for countries, regions, and localities to consider any development action without also considering its environmental consequences, and vice-versa, the fields continue to exist independently (Brandon & Brandon, 1992). Government bureaucracies typically assign these responsibilities to different agencies or departments. As a result, environmental and developmental agencies interact in government policies, programs, and projects only when procedural steps are established, such as a requirement that an environmental agency analyze the impact of or approve development projects. Even when discourses are in tune, as in the case of sustainable development, agencies can disagree on everything from the nature and design of interventions to who implements them. Compatibility between development and environmental goals continues to be mostly a theoretical dream.

Economic theory postulates that one way to make environmental and developmental objectives compatible is to put a price on environmental goods and quality (Anderson & Leal, 1992). Environmental value could then be aggregated with other economic values, and optimal economic solutions would maximize the total monetary value. This approach implies that environmental goods are protected only when individuals and organizations – that is, the marketplace – value them. One extension of this idea is the Kuznet curve, which plots the connection between changes in environmental quality and income. In the early stages of development, countries and regions increase their income while degrading the environment. As income reaches a certain level, environmental quality begins to improve as people place a higher value on it and have more income to devote to preserving it. For developing countries, the only way to attain high environmental quality is to become rich enough to afford environmental “goods” (Beckerman, 1992). The only role for governments in this context would be to value the cost of environmental degradation (Uhlig, 1992), to ensure that the market worked perfectly.

However, this approach suggests several limitations, even apart from the imperfect competition and distribution of information commonly ascribed to neoclassical economics. First, though environmental economics has evolved, it is difficult to place a value on environmental goods. Second, although some environmental problems such as certain kinds of water and air pollution can be reversed, many losses such as extinct species are irreversible. The Kuznet curve does not suggest solutions for the latter. Third, the
development path is not the same in all localities; some regions may not have to degrade the environment at all to reach economic prosperity. Finally, the economic approach does not account for the fact that the benefits and losses of environmental degradation and economic development are not distributed evenly, generating conflicts. Thus, governments have more roles to play by steering development.

2.2.) Organizing the State: Centralization versus Decentralization

The distribution of government responsibilities and resources fundamentally shapes the interaction between development and environmental policy. Decentralization has been at the core of the development and governance debates in developing countries since the 1970s. These debates have focused on which levels of government should be involved in development, as well as to what extent. Recent estimates show that decentralization is occurring in over 80 percent of developing and former communist countries (Manor, 1999). A growing academic literature focuses on the political economy of decentralization (Manor, 1999; Cheema & Rondinelli, 1983; Bennet, 1990).

The growing interest in decentralized government policymaking and administration results from four main factors (Rondinelli & Cheema, 1983). First, extremely centralized development projects organized by huge and inefficient government bureaucracies in the 1950s and 1960s produced disappointing outcomes, sometimes even aggravating the problems they were supposed to tackle and creating social and environmental distress (Lutzenberger, 1985). Second, growth-with-equity development strategies of the 1970s called for popular participation in the development process. Third, expanding government services in an increasingly complex society were difficult to administer in a centralized manner. Finally, calls from international organizations as well as local civil society for greater democratization, accountability, and transparency in the 1980s and 1990s helped put decentralization at the core of the development debate.

A growing body of literature produced the theoretical rationale supporting decentralization. Proponents generated a long list of reasons why governments in developing countries should decentralize (Rondinelli, 1981; Rondinelli & Cheema, 1983). The main arguments can be summarized by two points. First, decentralization boosts government responsiveness to the needs and desires of citizens. Second, decentralization improves government efficiency and efficacy. Responding to social and political pressure, decentralized governments find ways to offer more efficient services.

The literature describes various ways for decentralizing governmental responsibilities. The most common approaches are deconcentration, delegation, devolution, and privatization (Rondinelli, 1981). Deconcentration implies the transfer of tasks in a government agency from central offices (generally located in the capital) to offices located closer to the served population. These local offices are not politically independent or accountable to the local population but depend on the central government for budgets, instructions, and decision

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5 This division is not consensual and uniform. For example, some authors do not consider privatization a form of decentralization (Manor, 1999).
making. Delegation, in contrast, involves decentralizing tasks from the central government to other public organizations such as special function agencies or public corporations. Devolution entails the complete transfer of decisions regarding certain public responsibilities from a central government to a lower level government. Devolution for many authors captures the real spirit of decentralization, which is the transfer of authority to public institutions closer to the population (Parry, 1997). Finally, privatization, considered one form of decentralization by some authors, transfers certain public services from public to private organizations (Manor, 1999).

Decentralization has become a buzzword in development discourse – one that rhymes with democracy and efficiency. However, despite good intentions, these benefits often fail to materialize (Parry, 1997; Ayee, 1994). Instead of generating more participatory local government, decentralization can simply allow local elites to control services and resources, creating a local autocracy. Instead of becoming more efficient through the use of local knowledge, services decline in quality owing to a lack of local institutional and technical capacity to perform the new tasks.

To produce the benefits that theory predicts, decentralization must do more than transfer authority and responsibility from one institution to another. The new institutions must develop the professional capacity, financial resources, and political support to deliver the services effectively. National politicians and bureaucrats, afraid of losing power, can sabotage decentralization. Moreover, some authors suggest that central governments must play fundamental roles even when they decentralize power (Tendler, 1997). These roles range from developing the institutional capacity of local governments to monitoring and evaluating decentralized activities. Central governments must also prepare for this new role. Thus decentralization requires capacity building and political negotiation at all levels of government (Rondinelli & Nellis, 1986).

In developing countries, government policies tend to be viewed as highly centralized (Manor, 1999; Cheema & Rondinelli, 1983; Bennet, 1990; Morell & Poznanski, 1985). One agency or department is responsible for implementing a given policy and becomes jealous if other agencies interfere with its turf. Excessive centralization has been blamed for many policy failures in the past, and decentralization is viewed as a possible solution to these problems, as different agencies would be assigned complementary parts of a more complex task. In the case of a tourism development project within an environmentally protected area, for example, an agriculture agency would spearhead reforestation, a tourism agency would attract private investment, an environmental agency would monitor resource use, a local municipality would develop a land-use master plan, and a transportation agency would build roads. However, in practice lack of coordination can doom such efforts, especially when agencies have different objectives and institutional capacities.

2.3) Implementing Public Policies

Many people view policymaking as a matter of passing legislation, making plans, and distributing responsibilities. However, reality has taught a different story. Policies, programs, and projects often fail to be implemented as planned or exert unexpected impacts. The
catastrophic consequences of massive development in the Brazilian Amazon in the 1970s are examples of this mismatch between policy conception and implementation (Moran, 1982; Lutzenberger, 1985).

Because scholars have often viewed implementation as secondary to policymaking, the political science literature often focuses on legislative and administrative processes: how issues arrive on the political agenda, how laws are approved, and how agencies are created. A scholarly breakthrough occurred in 1973 with the release of Implementation, by Pressman and Wildavsky. That book analyzed how a U.S. program for helping minorities economically, led by the newly established Economic Development Administration (EDA), failed utterly, despite great expectations and much effort in Washington. In writing their book, the authors were surprised to discover a scarcity of serious academic attention to policy implementation, though they had heard so much about it. Pressman and Wildavsky's work awakened scholars to the promising but neglected field of implementation. The ensuing decade saw the publication of many works on both theory and practice (e.g.; Rein & Rabinovitz, 1977; Bardach, 1977; Berman, 1978; Elmore; 1979). Debates over implementation became part of the scholarly agenda. However, nearly three decades since the publication of Pressman and Wildavsky’s influential work, disagreement remains over the basic definition of implementation, as well as the techniques for studying and modeling it (Najam, 1995).

Defining implementation is not an easy task. Scholars have used several definitions, from concise and simple to more elaborate ones. Rein and Rabinovitz (1977) define the "politics of implementation"—how policies change as they move from administrative guidelines into practice—as: "1) a declaration of government preferences, 2) mediated by a number of actors who 3) create a circular process characterized by reciprocal power relations and negotiations." Mazmanian and Sabatier (1983) present implementation as the “events and activities that occur after the issuing of authoritative public policy directives, which include both the effort to administer and the substantive impact on people and events.” The study of implementation "requires understanding that apparently simple sequences of events depend on complex chains of reciprocal interactions" (Pressman & Wildavsky, 1973).

Some authors divide the implementation literature into generations (Goggin et al., 1990; Najam, 1995). Goggin et al. point to research in the 1970s that called attention to the need for an implementation research agenda. Although first-generation research demonstrated the complexities of implementation, studies were accused of being case-specific, lacking theoretical grounding, overlooking cumulative knowledge, and emphasizing pessimistic views (Goggin et al., 1990). The second generation tried to build theories on a larger number of case studies and develop models to explain variables and causality in implementation (Mazmanian & Sabatier, 1983; Edwards III, 1980; Van Meter & Van Horn, 1975). However, none of the models were able to validate propositions from earlier frameworks or replicate them in different cases. The third generation tried to combine theoretical and empirical work to identify the key variables explaining why implementation works in some cases and fails in others (Goggin et al., 1990; Najam, 1995; Grindle, 1980). This approach continues today, with new approaches focusing on "success" cases in developing countries (Grindle, 1998; Tendler, 1997).
Implementation has generated various hot debates and schools of thought. One of the most interesting concerns the top-down versus bottom-up approaches to implementing policy. Adherents of the former approach regard implementation as beginning with an authoritative decision, and assume that the process can be controlled from the top (Mazmanian & Sabatier, 1983; Van Peter and Van Horn, 1975). Countering this rationale, some scholars developed a bottom-up approach, in which street-level bureaucrats and the affected population greatly influence policy implementation (Elmore, 1979; Lipsky, 1978; Kaufman, 1973). Some of this research suggests that bottom-up influence not only occurs but is desirable because it adapts policies to local needs (Palumbo & Harder, 1981). These ideas coincided with the early boom in the decentralization literature (Rondinelli, 1981). Top-downers counterattacked, maintaining that bottom-uppers overemphasized the influence of local forces, and that they failed to consider how best to implement policy (Sabatier, 1986). As the top-down versus bottom-up debate evolved, thinking converged: scholars realized that they needed to understand both influences (Hanf, 1982).

Although some authors claim that their models based on developed countries are valid in any context (Van Meter & Van Horn, 1975), discussion of policy implementation have taken a different tack in developing countries. (This discussion has occasionally been influenced by the debate in developed countries, and vice-versa – see Grindle, 1980). The discussion regarding developing countries has tended to be separate because of the assumption – never tested – that the implementation process and local conditions are substantially different than in developed countries. The literature on developing countries differs in three ways (Najam, 1995). First, it has been more case based and less dependent on models because of the greater diversity in social, cultural and political contexts in these countries. Second, the case approach grounds this literature more firmly in the bottom-up approach. Finally, developing countries supposedly face more financial, technical, political, and cultural obstacles to implementing policy; these countries tend to have "strong societies and weak states" (Migdal, 1988, quoted by Najam, 1995).

Emphasis on implementation in developing countries has shifted from "nothing-works" case studies to "success cases" or best practices (Tendler, 1997; Grindle, 1998). The latter try to understand why a policy works even in a context that is seemingly unfavorable to success. These cases facilitate the understanding and design of policy policies in the same region or country, or in countries with similar social and political contexts (Tendler, 1997).

2.4) Implementing Environmental Policy in Developing Countries

The view of many developing countries regarding environmental protection changed significantly between the UN conference on sustainable development held in Stockholm in 1972 and the Earth Summit held in Rio in 1992. In 1972, a group of developing countries stated that they would not sacrifice their economic development to protect the environment. In 1992, those countries came with a more progressive agenda, and many signed environmental treaties, leaving some developed countries (including the United States) on the defensive. However, implementation of environmental treaties such as those signed at Rio is left to individual countries, which must translate them into policies, program, and projects to obtain results at national, regional, and local levels. At the point where intention becomes
action several problems arise, making implementation a strenuous task; more often than not environmental policies fail in developing countries. Shortages of technical capacity and scientific understanding may be common, but the complexity of the political economy in which the problem must be solved seems to exert an even more fundamental effect (Desai, 1992).

Environmental problems in developing countries stem from two fundamental sources. On the one hand, problems result when a nation grows economically and embraces more affluent (or "modern") lifestyles. In those situations industrializing countries produce waste and use natural resources at almost the same pace as industrialized countries. On the other hand, environmental problems are rooted in the poverty that affects large segments of the population. Peasants use slash-and-burn agriculture in an unsustainable way for survival, causing deforestation (Pichon, 1992; Oliveira, 1996). Pastures are overgrazed, expanding desertification. A lack of economic growth - and distribution of this growth - can perpetuate or aggravate some of these problems (Desai, 1992; World Bank, 1992).

The academic literature documents numerous failures in implementing environmental policies in some developing countries, such as in India (Vyas & Reddy, 1998; Reich & Bowonder, 1998), China (Ross, 1992; Jan, 1995), Eastern European countries (Hardi, 1992; Klarer & Francis, 1997), and Ecuador (Pichon, 1992). Common explanations for policy failure range from the classical Malthusian paradigm regarding rapid population growth to widespread corruption in political systems (Shams, 1994). Although these explanations may often be true, they do not suggest practical solutions to problems in implementing environmental policies in developing countries. To be useful to policymakers, analyses must identify the main factors that impede successful implementation and suggest how these obstacles could be overcome.

Toward that end, understanding the political economy in which the implementation process occurs is crucial. As Pressman and Wildavsky recognized, implementation - and especially environmental policy - encompasses the governmental and non-governmental sector as well as interorganizational links (1973). Thus, scholars have begun to analyze how organizations work together to successfully implement environmental policy in developing countries (Brinkerhoff, 1996; Lopes et al., 1996; Lemos, 1998). This literature provides practical recommendations to policymakers in developing countries.

The literature on environmental policy has identified several obstacles to policy implementation. One branch of the literature, mostly by economists, argues that distorted markets are the cause of most environmental problems, or that market mechanisms can prove significant in tackling environmental problems, even in developing countries (Panayotou, 1993; Anderson & Leal, 1992; Pearce &Turner, 1990). However, although market mechanisms may have a role in encouraging environmental protection, this author doubts that governments that fail to implement other kinds of policies would succeed in creating the needed market institutions and mechanisms. Most implementation problems are institutional. These problems range from lack of political support at different levels of governments to lack of financial resources to lack of institutional capacity.
First, environmental policies fail during implementation because environmental issues do not evoke enough political support from government or civil society at the central level, the local level, or both. Political support is essential in pressuring government agencies to enforce environmental legislation and counter the forces opposing environmental standards (such as groups of industrialists and farmers). The lack of political support for environmental enforcement is due primarily to the urgent need for economic development. Widespread poverty and low incomes prompt governments to promote rapid industrialization and agricultural production that often causes environmental harm, as in India and China (Vyas & Reddy, 1998; Ross, 1992). In other countries, such as Indonesia, economic activities based on natural resources (mainly forestry and mining) are important sources of hard currency, convincing governments to promote or allow rapid exploitation, especially during economic crises (Boardman & Shaw, 1995). Environmental concerns, which often conflict with these kinds of economic activities, have no place on the agenda.

Moreover, environmental agencies, when they exist, are often politically weak and cannot oppose economic development interests. At the same time, civil society does not press governments and private actors to uphold environmental standards. Groups in civil society such as environmentalists and neighborhood associations were fundamental to the "environmental revolution" in developed countries, but they still are nonexistent or lack political clout in many developing countries. Action by civil society is also hampered by political regimes, such as in China (Ross, 1995; Jan, 1992), or simply lack of interest on the part of most of the population (Vyas & Reddy, 1998; USAID, 1979).

However, with the democratization of many developing countries in the 1980s and 1990s, community and environmental groups have increasingly been in the vanguard pressing for better environmental standards and enforcement. Sometimes non-governmental groups ally with progressive government and private actors to push for change. For example, in the region of Cubatao in Brazil, one of the most polluted places in the world in the 1970s (called Death Valley), community groups, allied with officials in the state environmental agency, compelled polluting industries to comply environmental regulations (Lemos, 1998).

Second, the main obstacle to implementing environmental policies, especially for poor governments in a country, region, or municipality, may be funding. "The commitment of these countries [Eastern and Southern African countries] to sustainable environmental management is beset more by their lack of resources than by a lack of knowledge about the environment or lack of political will to promote sustainable development" (Salih, 1999). Government in developing countries may sometimes prioritize certain environment issues and obtain technical assistance to create elaborate plans, but may not have the financial resources to implement them in a sustainable manner. Although international donors sometimes provide funding, this financing usually covers a limited period of time and requires matching funds from governments, which are hard to obtain.

Finally, institutional capacity can be another obstacle to policy implementation. Besides the aforementioned lack of human resources, expertise, and equipment, institutional complexity can prove to be a major limitation. For example, some authors argue that decision making on environmental issues is too centralized and should be decentralized to local
institutions (Desai, 1991). However, conflicts or lack of communication among agencies or levels of government complicate this process (Oliveira & Ogata, 1998; Brinkerhoff, 1996; Vyas & Reddy, 1998). Others blame failure to implement policy on inadequate state-society relations and internal state organization, such as in Greece (Stevis, 1992). For Gamman (1995), the misunderstanding of the role of local culture by policymakers is one of the factors that can explain non-implementation of environmental policies in some Caribbean countries. Powerful ministries and pressing policies – perhaps as a result of a crisis – often divert resources from weak ministries or unpressing policies through official (budget discussions) or unofficial (behind the scenes political bargaining) means.

These obstacles (political, financial and institutional) provide a framework for understanding policy implementation in developing countries. Investigating the institutional arrangements that can overcome such obstacles is the object of this research. For example, decentralization of policy implementation was the fundamental institutional arrangement that generated a large number of environmentally protected areas (APAs) in Bahia. The conditions under which this decentralization occurred placed protected areas in the mainstream development agenda of the state. As we will see in the next chapters, decentralization created an institutional synergy that brought political, financial and institutional support for APA policy at the state and local level.
CHAPTER 3 - CREATING PROTECTED AREAS

This chapter discusses the establishment of protected areas around the world. It looks at how the concept of protected areas evolved over time, from exclusive reserves for privileged groups to the modern conception of national parks derived from Yellowstone. The chapter also looks at how this conception often conflicts with the interests of the people who live within protected areas, especially in developing countries. The benefits and costs of protected areas are discussed, including how tourism has become an incentive to creating protected areas. This chapter then examines the four obstacles that can explain the failure of efforts to establish protected areas in many situations: lack of political support, lack of funding, lack of institutional capacity, and lack of support at the local level. From these four obstacles, I construct the analytical framework for the case studies used in this research, at both the state (central) level in Chapter 5 and at the local level in Chapter 6.

3.1) The History of Protected Areas

A protected area can be defined as “an area dedicated primarily to the protection and enjoyment of natural or cultural heritage, to maintenance of biodiversity, and/or to maintenance of ecological life-support services” (Ceballos-Lascurain, 1996, quoting IUCN, 1991). For centuries, nations have created protected areas for different reasons, such as recreation, religion, and animal preservation. The first documented versions of protected areas appeared in China and India (Ceballos-Lascurain, 1996). As early as the twelfth century BC, Chinese rulers issued a decree for preserving a certain forest. In 252 BC, an Indian emperor circulated an edict protecting animals and forests. Pre-Colombian Mexico and African kingdoms also created different kinds of protected areas. Aztecs maintained zoological parks and botanical gardens. Rwandan rulers set aside certain areas where only part of the population had hunting rights.

In western cultures, a comprehensive approach to creating protected areas appeared in the Middle Ages. At that time, the populations of game animals were declining in many locations throughout Europe owing to growing population density, a greater number of hunters, and more efficient hunting methods. Nobles started worrying about the scarcity of prey. In 1084, King William I of England prepared an inventory of the natural resources of his country, including forests and fishing and hunting reserves (MacKinnon et al., 1986). The first game reserve documented in the western world was established in Venice in the eighth century, when the local government set aside a natural refuge for boars and deer. The idea spread to many parts of the continent, including the United Kingdom, France, and Central Europe.

In the nineteenth century, industrialization and urban and agricultural expansion caused many environmental problems including water pollution and erosion. Natural areas where the growing population could seek recreation became scarce in the main urban centers. Wilderness advocates demanded the preservation of natural spaces for many reasons, including the preservation of watersheds, recreation, and human contact with nature. The American philosopher Henry Thoreau argued that wilderness was fundamental to the success
of individuals and societies (Runte, 1997). In the United States, several efforts were made to create urban parks for providing leisure to urban dwellers, such as Central Park in New York and Boston Common. Around the same time, the federal government also granted a ten-square-mile piece of land to the state of California for creating Yosemite Valley State Park. This was the first legal preservation for public use of a wild scenic and recreational area (Nash, 1978).

The turning point in the modern concept of environmentally protected areas was the establishment of the 3,000-square-mile Yellowstone National Park in the United States in 1872 (Dubasak, 1990). The first national park in the world, Yellowstone established a large-scale wilderness reserve in the public interest (Nash, 1978). Before Yellowstone, large protected areas had been created mostly for the enjoyment of elites – nobles and individuals from certain classes. The creation of these private areas protected their abundance and aesthetic beauty from incursion by the majority of the population. Guardians were used to enforce trespassing rules. Trespassers could receive severe punishment, including the death penalty (Nash, 1978). Yellowstone and Yosemite changed this concept, showing that public institutions could create large-scale protected areas for the purpose of preserving natural resources in the public domain. Another important milestone was the creation of Adirondack Park in New York, first as a forest preserve in 1885 and then as state park in 1892. In contrast to national parks, Adirondack State Park encompassed mostly private land. In this case the state government’s reason for creating the park was the protection of watersheds that provided the public water supply for New York. This was achieved by restraining private development in a large area.

For over a century the spirit motivating Yellowstone has inspired the creation of protected areas for recreational, scenic, and economic values throughout the United States and many other countries, including Brazil (Padua, 1987). The Yellowstone Park Act provided a model for these efforts. That spirit was resurrected by the UN Conference in Stockholm in 1972 and the tremendous growth of the environmental movement starting in the 1960s, first in developed nations and later in developing countries (Ceballos-Lascurain, 1996). As a result, protected areas grew significantly in the last three decades. During the 1970s, the number of such areas increased by 46 percent and their area by over 80 percent (Harrison et al., 1984). Many of these areas are in developing nations (MacKinnon et al., 1986). By 1992, approximately 6,900 protected areas had been established in over 130 countries, covering an area equivalent to 5 percent of the earth’s territory (Ceballos-Lascurain, 1996, p.29).

3.2) Categories of Protected Areas

The modern concept of protected areas has evolved for more than a century, and justifications for establishing protected areas have multiplied. From Yellowstone’s principle of conserving wilderness for public recreation, rationales have expanded to include preserving biodiversity, pursuing scientific research, reproducing fauna and flora, maintaining cultural values, developing tourism, using resources sustainably, and even land-use planning. In this evolution, protected areas have assumed different forms to accommodate different objectives and managerial structures. Although national parks are the most common kind of protected
area in the world (Ceballos-Lascurain, 1996), many other categories of protected areas have also become common.

According to the World Conservation Union (IUCN), protected areas can be divided into six categories (IUCN, 1990 and Table 3.1). The first category, strict nature reserves, limit human visitation to scientific purposes. In general, these reserves include sensitive ecosystems with rare or endangered species that cannot withstand even minimal disturbances. The second category, national parks, are designed to reserve natural areas encompassing important ecosystems for recreation. Human activities are limited to certain areas and intensities. Natural monuments protect significant geological, biological, cultural, or aesthetic areas. Habitat management areas encompass endangered fauna and flora and include sites important for the reproduction and migration of species. Human presence is restricted to researchers and environmental restoration personnel. Protected landscape and seascape sites are conceived to prevent significant changes in places with important aesthetic values. The last category, managed resource protected areas, allows the sustainable use of natural ecosystems according to community needs. This range of categories gives governments flexibility in responding to the political, economic, social, and environmental conditions at stake.

Table 3.1 – Categories of Protected Areas

<table>
<thead>
<tr>
<th>Category of Protected Area</th>
<th>Main objective of management</th>
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</thead>
<tbody>
<tr>
<td>I – Strict Nature Reserve or Wilderness Area</td>
<td>For science and wilderness protection</td>
</tr>
<tr>
<td>II – National Park</td>
<td>For ecosystem protection and recreation</td>
</tr>
<tr>
<td>III – Natural Monument</td>
<td>For preservation of specific natural feature of inherent rarity, aesthetic or cultural significance</td>
</tr>
<tr>
<td>IV – Habitat or Species Management Area</td>
<td>For conservation through management intervention to preserve threatened species</td>
</tr>
<tr>
<td>V – Protected Landscape or Seascape Sites</td>
<td>For landscape/seascape conservation and recreation</td>
</tr>
<tr>
<td>VI – Managed Resource Protected Area</td>
<td>For sustainable use of natural ecosystems according to community needs</td>
</tr>
</tbody>
</table>

Source: Adapted from Ceballos-Lascurain, 1996, pp. 40-41.

3.3) Costs and Benefits of Protected Areas

The establishment of protected areas implies costs and benefits for society. These can be distributed locally, regionally, or globally, and exert impacts over the short, medium, and long term. For example, a protected area can provide food for the local population, offer recreation for urban dwellers, and preserve genetic diversity. However, the costs and benefits of establishing protected areas are not distributed evenly among the parties involved.
Creating protected areas often provokes conflicts over the uses of natural and cultural resources among different stakeholders.

Humans can benefit from conserving their natural environment, which supplies several kinds of services (Munashinge, 1996; Ceballos-Lascurain, 1996; MacKinnon et al., 1986). The environment provides products that humans consume directly, including fish, fruit, and game animals. These products can be used by locals or commercialized. Many indigenous groups still subsist completely on forest products, and rural residents often depend on the products they gather from surrounding natural environments. Other local populations collect and sell natural products to acquire cash. Some do that in sustainable ways – including traditional fishing communities and rubber tappers – and others in unsustainable ways – such as big logging companies in tropical zones.

The environment can also absorb and transform some of the byproducts of human activity, such as sewage and carbon dioxide. For example, forests soak up a significant fraction of the greenhouse gases that human activities generate. Nature also maintains numerous life-support systems, such as watersheds supplying urban areas. The natural environment helps control local natural disasters; floods, landslides, and siltation can be mitigated by environmental protection. Human-induced changes in regional and global environments, meanwhile, could destabilize sea currents and climate, causing droughts and floods that could undermine human activities.

The environment also contains an uncountable pool of genes whose characteristics are still poorly assessed, perhaps containing medical or nutritional properties. Also, humans use the natural environment for recreation; a growing number of people practice ecotourism in their leisure time. Recreation can create economic activities that generate jobs and income.

Despite these benefits, several costs are implied in the establishment of any environmentally protected area – costs that are usually shared by governments and the local population. First, preliminary studies, including scientific assessments and negotiations with local governments and people, are needed to determine the viability and importance of the proposed area. Second, once the area is created, it will need a management plan. This work can be performed totally or partially by the institution in charge of the area or by hired consultants. If this process involves local participation, organizing the participatory process will impose added costs. In the case of environmentally protected areas (APAs) in Bahia, these costs vary from US$ 40,000 to $250,000 for each APA, depending on the characteristics of the area.6

Third, many protected areas include private lands, and governments must expropriate the areas and compensate private landowners. The costs of doing so can be considerable, especially if large portions of the protected areas are private. For instance, nearly all of the Monte Pascoal National Park in Bahia was under private ownership when it was created in the 1960s (WWF, 1994). The costs of compensation can escalate if landowners fight in court for more funds. Governments in developing countries often struggle to find the financial

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6 Information obtained from public officials in Bahia.
resources to pay landowners, and many international donors to environmental projects like the World Bank do not provide funds for land acquisition (WWF, 1994).

Once a protected area is established, environmental restoration, monitoring, and enforcement require additional funds. Part-time or full-time personnel, private firms, and NGOs must be hired to operate and maintain protected areas. Enforcement officials need to be adequately equipped with vehicles (with fuel) and communication equipment, and surveillance flights, computers, and satellite imagery are sometimes required for periodic surveys.

Indirect costs are also associated with the creation of protected areas. Governments lose taxes formerly imposed on the land, and on economic activities that would otherwise have occurred in the protected area. Governments must also sometimes compensate neighboring landowners for the damage to their properties caused by wild animals from the protected area. Finally, there are the opportunity costs of locking up land and natural resources – the gains foregone from harvesting and selling resources and pursuing other economic activities such as agriculture or urban development.

3.4) Tourism and Protected Areas

One of the main reasons for creating a large number of protected areas is to provide recreation for local populations and tourists (UNEP & WTO, 1992). The establishment of many protected areas is an attempt to attract tourists while protecting the environment from substantial change stemming from other activities as well as from tourism itself. Revenues from tourism can significantly contribute to maintenance of protected areas and encourage individuals and organizations to preserve the environment from which they profit.

Different kinds of tourism depend on different kinds of preservation and environments. Some protected areas are established to preserve fauna and flora, and visitors are generally allowed only in certain zones and kept at a certain distance from the animals. This is the case of some natural parks in Kenya. Other protected areas are established for game hunting, as are many game reserves in Africa. In these cases, the goal is to maintain animal populations at minimum levels. Still other areas are created primarily to preserve certain landscapes or geological formations, as in the case of Yellowstone. Finally, entire rural environments can also become protected areas. In England, several protected areas were established to preserve the cultural and natural environment of rural communities. Some of these areas contain more than 250,000 inhabitants (Nash, 1978). Many visitors come to enjoy this bucolic environment that was quickly disappearing.

Protected areas can provide recreation for a large number of people and generate considerable revenue. For example, the US national parks are the largest tourist-attraction system in the world (Baker, 1990, quoted by UNEP & WTO, 1992); more than 270 million people visited these parks in 1989. US state parks are even more popular, with over 500 million visitors in the same year. In Kenya, tourism based on protected areas is the main source of foreign currency, bringing US$ 400 million into the country in 1989 (UNEP & WTO, 1992). Part of the revenue from tourism is often reinvested operating and maintaining
protected areas. For many developing countries that lack financial resources, income from tourism is the only means and justification for protecting the environment by establishing protected areas.

Recently, other factors related to tourism have stimulated the establishment of protected areas. Governments have created protected areas to attract private and public investments in tourism. Protected areas guarantee private investors that disorderly development will not occur next to their projects. The Bahia State Tourism Secretariat has advertised and emphasized this aspect in its brochure for private investors (Bahia State Government, n.d.). This also occurs when projects require financing from multilateral donors. In Bahia, the environmentally protected areas of Santo Antonio and Itacare were created as environmental safeguards to approve a project of road construction financed by multilateral organizations. Local governments have also established protected areas to attract investment from higher levels of government. Protected areas can signify that the local government is committed to controlling the impacts of tourism. Many municipalities in Bahia have tried to create protected areas to attract state tourism projects. Finally, protected areas have been advertised to attract tourists, particularly ecotourists. For instance, the municipality of Jandaira has published and distributed several brochures describing its main tourism attraction, the Mangue Seco APA (Prefeitura Municipal de Jandaira, n.d.).

However, even though tourism can attract funds for establishing and maintaining protected areas, it can also exert negative economic, environmental, and social impacts on protected areas. These impacts stem from construction of infrastructure, overuse of natural resources, and other activities that affect natural resources, fauna, flora, the landscape, and local culture. Thus, a balance must be struck between tourism and socio-environmental conditions. Overcrowding or misuse of protected areas can pose a major threat to effective environmental management. Many protected areas have already suffered negative impacts. In Nepal, Annapurna and Sagarmatha national parks have been impacted heavily by tourism. The harvesting of wood for building and heating lodges, deterioration of vegetation by trekking, and the accumulation of large volumes of uncollected solid waste are some of the consequences of the growing tourism industry. The number of tourists in Nepal, mostly trekkers, increased from under 10,000 in 1965 to over 240,000 in 1987 (Boo, 1990). Even some apparently low-impact activities such as birdwatching can have significant effects on the environment if they are not controlled. For example, large numbers of birdwatchers changed bird behavior in Loxahatchee National Wildlife Refuge in Florida (Burger & Gochfeld, 1998).

3.5) Explaining Failed Efforts to Establish Protected Areas

With growing information about the potential benefits of protected areas and pressure from environmentalists, the number of such areas rose significantly during the last three decades, especially in developing countries (Ceballos-Lascurain, 1996). However, academics, policymakers, and environmentalists agree that the need to expand the number of protected areas even further is urgent – as is the need to improve their management structures.

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7 Information collected from interviews with local government members.
While some governments in the developing world, such as Costa Rica, have pursued aggressive policies for establishing and maintaining protected areas effectively, many other countries have lagged in these efforts (Barzetti, 1993). Indeed, for every profitable and successful protected area, there may be hundreds that are not successful (Boo, 1990). Promoting, establishing, and implementing environmentally protected areas is not often a top priority in regions where poverty alleviation, rapid economic development, and resolution of internal and external conflicts are urgent needs. In these places, to succeed, protected areas must be proven solutions to those needs instead of one more problem to be solved.

Although the benefits of protected areas are enormous, several challenges to creating and implementing them must be confronted. First, protected areas are rarely perceived as an urgent need, and thus do not attract much political support. Second, once political obstacles to creating protected areas are overcome, governments often lack the funds to establish and manage them. Most environmentally protected areas in Latin America, for example, exist only on paper (Barzetti, 1993). Third, even when funding is not a problem, many government bureaucracies lack the institutional capacity to ensure effective implementation. For instance, even though national and international sources of funding were available, institutional “incapacity” was blamed for failures in implementing protected-area policies at the federal level in Brazil (WWF, 1994). Fourth and finally, local populations and governments often resist the establishment of protected areas because they see them as interfering in local matters, and a burden more than a benefit. The following sections will discuss these four obstacles in detail.

3.5.1) Lack of Political Support

Protected areas need to generate substantial political support. Governmental and non-governmental environmental groups trying to establish such areas have long faced strong opposition from private development interests and/or local populations, who see those areas as threats to economic activity, or as a government interference in private property (Nash, 1978). On the other hand, governments themselves often regard the creation of protected areas as a troublesome issue that should be avoided unless strong political or public pressure supports such an effort. Protected areas generally entail expropriation of private land, cessation of some economic activities (such as logging and construction), development restrictions, and interference with local matters. Such activities can generate controversy and opposition from strong political constituencies and lobbyists, including farmers, developers, property rights groups, and logging interests. Although these groups often do not constitute a local majority, they have financial resources and political contacts and can mobilize to inflict substantial political damage. In some dictatorships, especially in developing countries, these groups control the government and can silence environmental interests. Moreover, governments must assign and justify the institutional and financial resources to create and implement a protected-area policy from a limited budget (often in deficit). This situation has been aggravated in the last decade with growing international pressure on governments to cut their activities, deficits, and taxes.
Many of the political conflicts provoked by protected areas relate to the fact that different interests compete over the use of natural resources and land. Indeed, some authors point out that early national parks were created only because their land was not suitable for other uses, or there was no conflicting interests at stake (Nash, 1978; Pouliquen-Young, 1997). National parks such as the Grand Canyon, Yosemite, and Yellowstone were created in areas marginal for exploitation. No large park was created in highly productive agricultural regions, such as Illinois or Iowa (Nash, 1978). Similarly, in Brazil, all large national parks (with areas over 500,000 hectares) are in the Amazon region (WWF, 1994), mostly in remote areas where land has few competing uses and the creation of national parks is unlikely to cause conflicts.

At that point large natural areas were abundant, but few people saw the need to set aside areas for environmental preservation. Environmental movements did not have the same political power they have today. In the United States, for example, the concepts of national parks and environmentalism were contrary to many powerful nineteenth-century ideas regarding territorial expansion, conquest of nature, and exploitation of natural resources.

In industrialized countries, environmental movements grew to become an important political force propelling creation of protected areas and other environmental initiatives. However, especially in developing countries, the notion of environmental protection has seemed antagonistic to the need for rapid economic development to alleviate widespread poverty. At the UN Stockholm conference in 1972, the Brazilian government, together with other developing nations, positioned itself radically against the environmental agenda. That agenda was seen as a maneuver of the industrialized countries to impede Third World nations from developing, and external interference in domestic matters (Loureiro & Pacheco, 1995). Thus, environmentalism was not, and still is not in many countries, an important political force mobilizing support for protected areas. Some progress in developing countries regarding protected areas was initiated by committed public officials or important personalities sympathetic to environmental causes. In Brazil, for example, an influential public administrator suggested creating the first national parks, and a public bureaucrat created a new class of protected areas that could be established without interference from pro-timber interests (Padua, 1987; Nogueira Neto, 1992). In Costa Rica, the government successfully adopted ecotourism as an economic alternative early on (Boo, 1990).

With the democratization of various developing countries, especially in Latin America, many environmental movements have emerged and begun trying to mobilize the population and influence political decision making. Public and government interest in environmental matters therefore seems to have grown (Boo, 1990). However, many environmental groups in developing countries act only locally and do not have strong institutional and financial capacities. Although sometimes these groups are numerous, they do not have the cohesion of other organized interest groups (especially those monitoring economic development) that promote their political agenda in the legislature and executive branch. Environmental interests within the government similarly often have little political power, so they are underfunded. They also lack the important political contacts of pro-development groups. For example, the head of an environmental agency is often a scientist without many political contacts or the experience to promote the agency’s interests.
Organizing these environmental constituencies and strengthening their ability to influence political decisions are essential if the number and size of protected areas are to grow, according to specialists and advocates worldwide (McNeely, 1993).

The lack of political support for protected areas is often attributed to deficient communication concerning the importance of such areas (McNeely, 1993). The economic and social benefits of protected areas are numerous (Boo, 1990; Ceballos-Lascurain, 1996; Munasinghe & McNeely, 1996; Wells, 1997), but environmental interests sometimes lack the skills and resources to spread the word through environmental education, political lobbying, and use of mass media. For example, the success of the U.S. National Park Service in building broad support for national parks was credited to the service’s first director (Nash, 1978). An expert in public relations, this director placed articles about the parks in national magazines and brought key politicians to tour the protected areas. These activities enhanced public concern over protected areas and built broad political support for them within the federal government and Congress.

The recent rise of ecotourism has enabled policymakers and the public to perceive the benefits of protected areas, as tourism is a tangible direct benefit. This facilitates communication with and support from a broader constituency for protected areas. In Bahia, the state government mustered the support of many pro-development actors to protected areas by extensively advertising its ecotourism attributes (Bahia State Government, n.d.).

The distribution of responsibility for protected areas within governments is also important in securing political and institutional support (MacKinnon et al., 1986). Placing protected areas within the jurisdiction of an underfunded and politically weak agency, such as the environment ministry in many developing countries, can undermine support. Some authors suggest that protected areas should be placed under the control of powerful revenue-generating agencies such as agriculture and forestry (MacKinnon et al., 1986). However, if environmental objectives clash with the primary goals of these development agencies, they could simply support the latter, neglecting environmentally protected areas (Oliveira & Ogata, 1998).

Another issue in assigning government responsibility is whether all protected areas should be under the control of one agency. Such an approach could improve institutional coordination and assign full responsibility for successes or failures to that agency. That approach would also unify pro-protection political activity, as the agency could be the bastion fighting for protected areas within government. External actors would know which officials to pressure to stimulate government action regarding protected areas. However, concentrating protected areas in one agency could also create a backlash. The agency could be viewed as the “environmental police,” generating conflicts with and political isolation from other government bureaucracies and leaders. This agency could also be poorly managed, preventing significant action on protected areas. Although some authors support the placement of the agency in one politically strong and revenue generating ministry or department (MacKinnon et al., 1986), strong ministries or departments in developing countries may also be under budgetary constraints and give protected areas low priority. Protected-area policy may also
clash with the developmental priorities of the powerful ministry, such as expansion of agricultural or timber production.

Decentralization of responsibility for protected areas among several agencies could produce a governmental coalition supporting environmentally protected areas. These agencies could work together to gain approval for their projects. However, decentralization could also spur competition and grievances among the agencies, spurring them to block each other’s projects. Decentralization could also open a political vacuum in which each agency hands responsibility to others and no agency assumes any real responsibility for protected areas (Oliveira & Ogata, 1998).

There is no consensus or much empirical evidence on the best way to establish responsibility for protected areas within governmental institutions. Governments have adopted different approaches to assigning such responsibilities. In the United States, the federal government disperses responsibility for protected areas among several agencies in different departments, mainly Interior, Agriculture, and Defense (US Department of Interior, 1975). In some countries, such as Uganda and Tanzania, protected areas assume a parastatal form that gives them more political independence from government (MacKinnon et al., 1986). In Brazil, since the 1980s, the federal government has concentrated responsibility for all federally protected areas in one agency, the Federal Environmental Agency (IBAMA – Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis). At the state level, assignment of protected area responsibilities has varied. For example, in Bahia, they are dispersed among several state agencies in different secretariats.

### 3.5.2) The Lack of Funding for Protected Areas

One of the major problems facing protected areas in developing countries is a lack of funding (McNeely, 1993). In many countries, public institutions have limited financial resources even for the most basic public services, such as education and water supply. Some government services depend on external aid just to survive at a minimal level. Even in medium-income countries such as Brazil, some states and municipalities operate under precarious conditions and provide almost no public services. Environmental protection is rarely a priority in their political agendas. Moreover, in the last decade proponents of “neoliberalism” have argued that to compete in a global economy, governments must reduce their deficits and shrink their operations. To improve environmental management and establish new protected areas, public agencies often have to hire new people, invest in training and equipment, and expand their operating and maintenance capacity, but funds are scarce and hiring public employees is difficult in this climate.

Under such conditions, where can governments find the financial resources to maintain and expand protected areas? Many possible sources of funding for protected areas do exist. Those sources include government budgets, park entrance fees, taxes on products such as tobacco and alcohol, private and nonprofit groups, and international agencies (such as the UN Global Environmental Facility and the US Agency for International Development). These private, nonprofit, and international sources often fund specific projects, but the funds are also often sporadic and temporary. A common source of financing for protected areas are
trust funds managed by a governmental or quasi-governmental institution. However, external sources generally make only a limited contribution to these funds, which governments must match with substantial resources, including personnel, material, services, and cash (MacKinnon et al., 1986). Thus, the bulk of sustainable funding for protected areas usually comes from internal sources, mainly entrance fees and government budgets, as in the case of Brazil.

Many protected areas generate substantial income from visitors. Some of these areas are profitable, with the surplus used to support other less profitable areas. In Rwanda, park entrances in the Parc National des Volcans earned approximately US$ 1 million per year before the civil war. In Ecuador, the Galapagos National Park generates US$ 700,000 per year in direct revenues (WTO & UNEP, 1992). In United States, cost recovery from users ranges from under 10 percent for the national park system to more than 100 percent for New Hampshire state parks (LaPage, 1996). In South Africa, government cut funds for maintaining protected areas, but operations contributed almost half the areas’ funding in 1995 (Wells, 1996). Federal and provincial governments in Canada collect US$ 1.7 billion annually in taxes from wildlife-related tourism, but spend only about US$ 300 million on those programs.

In some developing countries, the recovery rate from investments in wildlife conservation is more than 5 to 1 (Ceballos-Lascurain, 1996). However, there are many cases where tourism revenues do not fulfill expectations and the protected-area system collapses from underfunding. In Benin, Africa, the revenues from tourism were much lower than that expected – too low to provide adequate funding for the park system and income for the local population (Sayer, 1981, quoted by Boo, 1990). Several protected areas do not attract many visitors because they do not have important attractions or are located in remote areas with poor infrastructure. Therefore, in many developing countries, protected areas are not properly managed because there is no funding from entrance fees and governments cannot afford to support them.

In many countries, government budgets continue to finance the creation and management of protected areas either totally or partially (Mackinnon et al., 1986). Even where protected areas successfully raise capital from visitors, as does the U.S. National Park Service, government budgets must complement the funds for proper management (Nash, 1978). Agencies in charge of protected areas must fight for portions of the budget within a department or government. Those agencies must be technically convincing and politically skillful in their arguments to persuade budgetary administrators of the need for funding. Sometimes the relationship between costs and benefits of a protected-area system is not clear. Although preserving natural resources generates many social benefits, these are often indirect and non-monetary, and spread over society and over time. They are difficult to account formally. Environmental agencies do not receive any real cash for those benefits.

Another challenge is that many of the costs of creating and implementing protected areas must be paid up front or in the short-term. Environmental agencies must hire and pay employees, buy land and material, and pay bills. Even though entrance and other fees can
make some protected areas profitable, governments often lack the funds for up-front investments needed to establish protected areas.

In short, the cost-benefit analysis often used in governmental decision making overlooks many benefits, even though techniques for evaluating those benefits have improved in the last two decades. And it is difficult to promote intangible benefits within governments that are short of cash for investment and operating costs.

3.5.3) The Lack of Institutional Capacity

Political support and funding are essential for the establishment of protected areas. A comprehensive protected-area policy requires the endorsement of a strong political constituency to insert it into the government agenda and overcome opposing forces. It also needs funding for planning and implementation. However, even with political support and funds, protected area policies can fail because governments have weak or no institutional capacity to carry out policy objectives. Agencies in charge of protected areas may lack or misuse personnel, training programs, and materials. In Madagascar, lack of institutional capacity of the agencies in charge of protected areas has been one of the main obstacles to improving them (Hannah et al., 1998). In Brazil, the Federal Environmental Agency (IBAMA) has attracted several national and international sources of funding for protected areas, but it has not had the institutional capacity to implement a comprehensive policy (WWF, 1994). One of the reasons for this is the misallocation of personnel. IBAMA had 7,000 employees, but only 6 percent (437 employees) work on protected areas in mid-1990s. As a result, IBAMA has lagged in instituting many programs involving protected areas. For instance, the National Fund for the Environment (FNMA, Fundo Nacional do Meio Ambiente) was created in 1989 and assigned US$ 22 million for environmental protection between 1992 and 1996, owing to a loan from the International Development Bank. However, only US$ 1.8 million had been used by the end of 1993 because of institutional deadlocks.

To implement protected-area policies, government organizations need to perform several activities, including proposing and planning protected areas, developing management plans, and gaining approval from legal and political authorities (MacKinnon et al., 1986; UNEP & WTO, 1992). These activities require a certain institutional capacity on the part of organizations in charge of protected areas. This institutional capacity may include qualified personnel (full- or part-time employees and consultants), infrastructure, appropriate equipment, and services. With this capacity in place, government organizations can perform studies, conduct field trips, negotiate with other actors, analyze consulting reports, respond to political demands, and publish material. If an adequate institutional capacity is not in place, organizations have to build a structure to implement protected-area policy. In the process of building their capacity, organizations may buy equipment and services, hire or move staff, contract with consultants, and invest in short-term or continuous training.

Protected-area policies should rest on an organizational structure that has, or can build, the institutional capacity to perform the implementation task properly. As we saw in a previous section, governments can place all protected areas under one governmental or
parastatal organization. This can concentrate, instead of dispersing, efforts to acquire the skills, personnel, and resources for effective protected-area management. This can also avoid rivalries and lack of coordination among different agencies (MacKinnon et al., 1986). However, overlapping the same governmental function among several agencies can generate synergistic effects (Landau, 1969). When more than one agency is working on the same problem, the chances that one of them will actually do the work increase. Also, agencies can cooperate to complement their institutional capacity. For example, one agency might have more expertise in biological surveys, offering this capacity to other agencies; another might have officials more experienced in physical planning who can supplement the lack of this expertise in other agencies.

Individual agencies may also strive to improve their institutional capacity to gain leverage for protected-area projects. By working more efficiently and effectively, agencies can demand or create more projects and gain political prestige.

Several possible organizational arrangements could ensure adequate institutional capacity for implementing protected-area policies. From the literature, it appears that there is not enough evidence to suggest one right model. Effective implementation of such policies seems to depend on several factors. Those factors include initial institutional capacity in the government, funding alternatives, the relationship among participating agencies, the existence and attitude of non-governmental actors, and opportunities for improving institutional capacity.

3.5.4) The Lack of Cooperation and Coordination at the Local Level

The successful establishment of protected areas depends on the support of local governments and communities (Boo, 1990; MacKinnon et al., 1986; Ceballos-Lascurain, 1996; UNEP & WTO, 1992). If locals perceive protected areas as an interference in local matters or a burden, they can become uncooperative and make fulfilling protection objectives almost impossible (MacKinnon et al., 1986). However, locals can also play a key role in implementing protected-area objectives if they view them as beneficial in the short and long term (Albers & Grinspoon, 1997). Locals can provide important information for developing the management plan, and complement institutional capacity by helping publicize and enforce protected-area guidelines.

In many countries, local governments or communities determine land-use rules and legislation. When an upper-level government (such as the state or federal government) establishes protected areas, it is restricting land use. Such a move could conflict with local interests and the politicians who promote them. Although upper-level legislation regarding protected areas generally overrules local legislation, local governments are important in generating support for protected areas, as they know key members of their communities. They can help inform the local population, and they are often knowledgeable about the main threats and problems at the local level.

To complement upper-level governmental action, local officials can pass their own legislation legitimizing protected areas, and provide some institutional capacity to implement
protected-area guidelines. However, governmental levels may dispute jurisdiction over land use or environmentally protected areas, and such disputes can compromise their implementation. For example, in South Africa, efforts to establish protected areas in some regions have failed because of conflicts between provincial wildlife conservation agencies and the national park board (Wells, 1996).

When the modern conservation movement began at the end of the nineteenth century, the notion of a “protected area” implied the complete removal of humans. These areas would be “islands” where nature would be left alone, separate from human activities except for those entailed in appreciating it. As the American conservation advocate John Muir said in 1890, “Our wild mountains should be saved from all sorts of commercialism and marks of man’s work” (Nash, 1978). Protected areas were designed as a modern idealization of what nature should be, untouchable by humans (Diegues, 1994).

As the conservation movement expanded to developing countries, many protected areas were created regardless of the existence of local people. Often these people had lived in the region for generations, sometimes before formal states were established. Lines for parks or reserves were drawn without considering the fact that people lived in those areas or used them for cultural, religious, or subsistence activities, such as hunting, fishing, and collecting fruits and firewood (Rawat, 1997). In some cases, local populations were forced out. In many parts of Africa, police enforced protected areas at the expense of local people during the colonial era, and even after it had ended (Wells, 1996). In Brazil, indigenous people who had been living in the Monte Pascoal National Park before the Portuguese arrived in Brazil in 1500 were expelled and prohibited from entering the new park, confined to a reservation next to it.

In the last four decades, as many developing countries have expanded their protected areas, such moves have provoked local conflicts (Tisdell, 1995; Fiallo & Jacobson, 1995). Local communities have often borne great losses when protected areas have been established, and have gained almost no benefits (Wells, 1996). Policymakers, park managers, and academics have begun to realize that local people should benefit from protected areas and are fundamental to their design and implementation (MacKinnon et al., 1986; McNeely, 1992; Ceballos-Lascurain, 1996; Albers & Grinspoon, 1997).

Local communities often use the natural resources that are the target of preservation. With the creation of protected areas, communities generally have to give up use of those resources either totally or partially. If the area attracts tourists, communities have to share their natural resources and communal space (Ceballos-Lascurain, 1996). Thus, many communities may be uneasy or hostile to the idea of protected areas. To support them, communities need to feel that they are benefiting because their natural resources are protected from poachers, or because they communities gain from tourism activities.

Officials implementing protected areas can compensate communities through several mechanisms. They include paying for land claims, sharing revenues from park entrance fees, employing local people, purchasing local goods, encouraging local participation in tourism enterprises, and offering development assistance to local projects (Wells, 1996).
Development projects compensate local populations for the opportunity costs of foregone activities in protected areas. Such projects can involve building roads, enhancing the water supply, providing sewage treatment, and constructing schools and hospitals. These projects also often improve the infrastructure for tourism activities, from which communities benefit indirectly as well. Local governments also gain politically from these projects, as politicians can claim credit for delivering them.

Of course, such projects can increase development pressures on protected areas and facilitate access to illegally harvested products such as timber and wild animals. Development projects such as roads can also spur activities that can threaten protected areas, including agriculture, cattle raising, and new development. Thus, development efforts should rest on a detailed analysis of their benefits to local people and tourism, as well as their threats to conservation.

The possibility of benefiting economically and culturally from tourism can encourage local populations to support local areas. With the growing market for ecotourism (Boo, 1990), locals can earn income from tourism. Possibilities range from establishing their own businesses, to becoming guides, to selling their products, to working for new tourism business. Some countries, like Costa Rica, have successfully established several ecotourism projects with substantial support from the local population (Boo, 1990). However, many ecotourism projects fail, frustrating the local population (Sayer, 1981). Locals sometimes invest a significant part of their savings, or even loans, in failed tourism enterprises. Also, tourism activities often mostly benefit outsiders, leaving the local population with only marginal jobs (Wilkinson, 1992).

Communication and training are major components of raising support for protected areas at the local level (MacKinnon et al., 1986, McNeely, 1993). Local populations can develop negative attitudes toward protected areas when they are not well informed about them (Fiallo & Jacobson, 1995). Locals should be aware of restrictions on protected areas, but most importantly, they should clearly associate environmental conservation with income opportunities. This can be achieved through public hearings, door-to-door contacts, local media, and environmental education in local schools.

To help locals benefit from tourism, they should receive training in tourism activities and information and financing in establishing their own businesses (Wells, 1996). Training and information can spur environmental consciousness and the establishment of local nongovernmental environmental groups. These groups could convince governments of the need to create local environmental agencies to help enforce protected-area guidelines. Training could also focus on building local institutional capacity to complement enforcement. The agency in charge of the protected area could provide training for local governments and NGOs in enforcing environmental rules. They could also hire them or provide equipment and personnel to perform some or all enforcement tasks.

The process of delineating protected areas is also an important factor in avoiding conflicts with local populations or governments (MacKinnon et al., 1986). From a conservation standpoint, biological preservation should be a priority; various models discuss
the optimal shape of certain protected areas (Dearden, 1988). However, the limits of protected areas should also take into account several other factors, such as tourism needs, local government borders, local economic activities, and existing systems of land tenure.

Protected areas can include one or more local governments. Spreading a protected area over several governmental jurisdictions can avoid conflict because only part of a certain municipality or province is set aside for preservation. Such an approach can also encourage several governments to share enforcement. On the other hand, the involvement of several jurisdictions can make coordination difficult. Lack of communication, training difficulties, and local rivalries can compromise the success of the implementation task.

The flexibility and will to negotiate the use of natural resources and land with local landowners and communities are also significant factors. Sometimes negotiating less strict environmental rules with local actors can attract local support, but such support can also come at the cost of a smaller protected area and lower level of conservation (Albers & Grinspoon, 1997).

Protected-area authorities and locals could jointly define environmental guidelines and reach a formal or informal agreement balancing local and preservation interests. Locals could be allowed to harvest certain products from the protected area, such as fish or fruits. For example, local villagers supported the Sariska Tiger Reserve in India and Maputo Elephant Reserve in Mozambique, even though wild animals caused losses on their properties, because they were allowed to gather fodder, fuelwood and other resources from these reserves (Sekhar, 1998; De Boer & Baquete, 1998). Landowners or communities could also be allowed to develop part of their land if they preserve the rest. Flexibility in land use and environmental rules can alleviate restrictions on locals, but the degree of flexibility and negotiation of those rules should depend on the kind of protected area, the initial local situation, and the willingness of locals to comply with agreements.

Analysis of the role of local actors in establishing and managing protected area is complex. Moreover, pursuing effective local participation is not easy. Extensive experience in several countries demonstrates that active local participation in developing countries is rare and difficult to achieve (Wells, 1996). Varying social, economic, institutional, and environmental situations makes it difficult for one region to learn from the experiences of another. Widespread poverty in developing countries is a challenge and may impose high demands on preservation. A balance between conservation, development, and human needs should be the goal of many protected areas in developing countries.

Overall, these four challenges – lack of political support, lack of funding, lack of institutional capacity, and lack of support at the local level – supply the framework for analyzing the case studies in Bahia presented in Chapter 5 and Chapter 6. In Chapter 5, the story at the state level, I discuss how decentralization of protected-area policy to several state agencies overcame each of the four obstacles at the state level. In Chapter 6, I rely on seven local case studies to determine how local governments and non-governmental groups overcame political, institutional, and financial obstacles to support enforcement of protected-area guidelines.
3.6) Tourism as a Force for Establishing Protected Areas

The natural environment has emerged as a competitive asset that brings tourists and investment to many regions of the world, generating economic development. However, the impacts of tourism development can destroy the same environment and undermine further investment. Indeed, poor environmental management can ultimately destroy tourism itself (see Appendix 3 for an overview of the impacts of tourism).

Concern about the important role of the environment in supporting economic activity is not new. In the tourism field, these concerns started to appear in the 1970s when the environmental and social impacts of tourism on certain regions became more evident (Hunter and Green, 1995). Places like Acapulco in Mexico, the French Riviera, and Mallorca and Torremolinos in Spain faced environmental problems related to tourism (Bosselman, 1978, Llinás, 1996 and Pollard and Rodriguez, 1993).

Governments play two central roles in developing tourism. Public funds can be used to construct the necessary infrastructure and promote tourism. Government agencies in charge of environmental and land-use regulation must also control the social and environmental impacts of tourism (see Appendix 4 for an analysis of the role of government in protecting the environment from the impacts of tourism). These two public roles may seem contradictory, but they do not need to be, in principle.

Governments often first concentrate their efforts on promoting tourism and then later, when environmental conditions deteriorate to levels that threaten tourist activity, try to mitigate tourism's impacts (Mathielson & Wall, 1996). However, since the mid-1980s, environmental quality has been deemed essential to the growth of tourism, and several governments have recognized the importance of this activity for economic development. Consumers as well as local and external actors have pressured governments to change their development approach. Thus, many governments are introducing tools for environmental planning and management to prevent environmental degradation and declines in tourism.

These two government roles—development promoter and environmental protector—seemed to inevitably conflict in developing countries. On the one hand, critics singled out government investment as one of the main causes of environmental degradation in many developing countries. On the other hand, key leaders of developing countries claimed that they did not want to sacrifice economic development for environmental protection, and that they did not have enough resources to invest in environmental quality.

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8 For instance, the deforestation of the Brazilian Amazon in the 1960s and 1970s was mostly provoked by government investments in infrastructure and agrarian colonization projects (Moran, 1983; Mahar, 1989; Oliveira, 1996). The federal government and multilateral financial institutions, like the World Bank, are blamed as the main stimulators of this environmental "tragedy." Another famous case is the huge environmental and social impacts of the Sardar Sarovar Project in the Narmada River, India (Fisher, 1995; Morse, 1992; Baviskar, 1995).

9 The well-known discourse of some developing countries in Stockholm (1972) and Rio (1992): "the industrialized nations destroyed their environment to be rich, so why can't we do the same?" (Viola, 1992; Loureiro & Pacheco, 1995).
However, the environmental agenda of many governments in developing countries seems to be changing. Tourism has the potential to become an important economic activity in many countries, and good environmental quality is essential to attracting a significant slice of the tourism market, especially ecotourism (Boo, 1990). Ecotourism is defined as “traveling to relatively undisturbed or uncontaminated natural areas with the specific objective of studying, admiring and enjoying the scenery and its wild plants and animals, as well as any existing cultural manifestation” (Ceballos-Lascurain, 1988). In economic terms, ecotourism is a non-consumptive use of natural resources that increases their economic value. Developing regions that still have well-preserved natural areas can generally pursue ecotourism as an alternative form of economic development (Alderman, 1994). This economic motivation improves the political and financial viability of environmental conservation initiatives.

Tourism has helped motivate environmental preservation in several developing countries. In Ecuador, the number of tourists had steadily grown since the 1970s (Boo, 1990). Most of these tourists came to enjoy Ecuador’s cultural and natural attractions. Fifty-two percent of tourists responding to an airport survey pointed to visitation of protected areas as the most important reason to come to Ecuador, especially Galapagos National Park, a UNESCO World Heritage Site (Boo, 1990). Revenue from entrance fees from Galapagos had helped fund the creation and maintenance of other protected areas. The Ecuadorian government, through the Ecuadorian Park Service, had worked on a new national preservation strategy based on the creation of protected areas in 1990 (Boo, 1990).

Costa Rica is another example of how nature-based tourism can generate revenues and increase the economic and political viability of environmental protection. More than 50 percent of Costa Rica’s tourists practiced ecotourism by visiting a protected area, according to an airport survey (Boo, 1990). Tourism has become one of the nation’s most important economic activities. In 1988, tourism revenues totaled US$ 165 million, and constituted the third-largest export activity (Chant, 1992, p. 91). In 1993, tourism became the country’s top foreign exchange earner (Honey, 1999). Although some critics argue that Costa Rica’s tourism is not much different from conventional tourism (McLaren, 1998), since the 1980s Costa Rica has become an internationally recognized nature-based tourism destination (Chant, 1992). Promoted initially by private tour operators, nature-based tourism was embraced by the national government as a high priority. Environmental protection became a buzzword, and environmentalism became part of the country’s consciousness. Plans were promoted and laws were passed to give incentives to environmental protection and tourism promotion. Today, at least 25 percent of Costa Rican territory is under some form of environmental protection (Honey, 1999).

It seems that tourism can create some of the positive conditions for spurring protected-area policies. In the last two decades, tourism has emerged as a driving force behind the establishment of protected areas in many developing countries. The need for environmental conservation as an asset in developing tourism activities is a powerful idea. Many governments have created protected areas as a result of pressures related to tourism development.
The establishment and implementation of protected areas present several obstacles at the government level, such as political obstruction, lack of funding, insufficient institutional capacity, and resistance at the local level. These obstacles are especially difficult to overcome in developing countries, where environmental protection is not often a top priority. Because most of the responsibility for establishing protected areas rests with governments, the effectiveness and efficiency of any protected-area policy depend on the importance governments assign to protected areas, and on their ability to create and maintain them. Social, environmental, and political conditions greatly influence the outcome of protected-area policies. Moreover, the way governments devise their organizational structure to implement and oversee protected areas seems fundamental to shaping the results.

The next three chapters cover the case of environmentally protected areas in the state of Bahia, Brazil. The state government’s determination to promote tourism as a priority of the economic development agenda was fundamental in explaining the creation and implementation of many protected areas, especially in zones with tourism potential. Several state agencies that worked in tourism and infrastructure development became involved with protected areas. Thus, the association of protected areas with the potential benefits of tourism, and the organizational arrangement for dealing with protected areas, are crucial to understanding why many of the political, institutional, and financial obstacles to establishing protected areas were overcome in Bahia.
CHAPTER 4—UNDERSTANDING ENVIRONMENTAL POLICY AND ENVIRONMENTALLY PROTECTED AREAS (APAS, ÁREAS DE PROTEÇÃO AMBIENTAL) IN BRAZIL AND BAHIA

Over the last 30 years, the landscape of the Brazilian State of Bahia has undergone rapid transformation, especially along the coast. Huge industrial clusters such as Camaçari and Aratu have grown up. Agricultural activities have also expanded along the coastal strip. Logging has advanced toward the few remaining areas of the Atlantic Forest, especially in the southern part of the state. Coastal cities have boomed in a disorderly fashion. Tourism has spread rapidly around several towns such as Porto Seguro and Ilhéus. More recently, following infrastructure improvements, the frontier for tourism development has advanced to the northern coast.

Many of these activities have taken place without proper environmental planning, causing problems such as air and water pollution, deforestation, and destruction of officially protected ecosystems, such as the Atlantic Forest in southern Bahia. This forest is thought to have the world’s highest tree biodiversity (Conservation International, 1995). Because the southern part of the state has one of the fastest-growing tourism and forestry industries in Brazil, the Atlantic Forest has largely disappeared over the last few decades (see Figure 4.1, and SEI, 1995). Moreover, many traditional communities – which house some of the poorest and most powerless people in the region – have been transformed both physically and culturally.

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10 Many coastal ecosystems, such as dunes and mangroves, are officially protected under the Brazilian federal constitution. However, due to the lack of proper enforcement mechanisms, developers and squatters have occupied and destroyed part of these ecosystems.

11 In 1993, Brazilian scientists and researchers of the New York Botanical Garden announced that they had found the highest tree biodiversity in the world during a field research in Southern Bahia. More than 450 species of trees were found in one hectare (Conservation International, 1995).
At the outset, unrestrained development along the coast was not viewed as a problem since it was occurring in isolated areas. More recently, however, the tourism model of development has spread to larger areas, and tourism has gained support as an attractive regional economic development stimulus. Governmental agencies and some parts of civil society in Bahia have realized that weak environmental management is a potential threat to the long-term viability of tourism along Bahia’s rich coast, as well as to other areas with tourism potential. If uncontrolled development continued, the natural environment and traditional coastal communities would be seriously affected, and consequently the potential for tourism could be undermined.

Since the nation’s democratization in 1985, actors in civil society, such as non-governmental organizations (NGOs) and community organizations, have increasingly pressured governmental authorities to take greater responsibility for protecting environmental resources and the well-being of coastal communities. For example, in the coastal village of Balbino in the state of Ceara, developers burned houses and threatened villagers with death to force them from their land, which was partially covered by mangroves. With the support of NGOs, communities highlighted these issues in the mainstream media and pressured local and state authorities to take action to protect local people and award them title to the land. In the end, state government legalized local land titles and created an environmentally protected area (APA) in the region to avoid land speculation. In Bahia, local inhabitants in Abaete APA have denounced a construction project that violates APA guidelines and are trying to stop it in

---

12 Bahia has the longest littoral in Brazil with approximately 1.2 thousand kilometers. Most of it is formed by mangrove and beautiful beaches with large potential for tourism.
court, even though developers have a municipal construction permit (A Tarde, 1997a; A Tarde, 1997b; A Tarde, 1998a; Ministério Público Federal, 1997).

The mere identification of a problem is rarely sufficient to spur determined state action. There have been several obstacles to an expanded state government role in environmental protection, especially the creation of conservation units. First, zoning and other land-use controls are interpreted in the Brazilian Constitution as municipal responsibilities. Therefore, the state has limited power to intervene. Second, traditional approaches to protecting sensitive environmental areas usually involve the expropriation of land. This would be extremely costly for the entire area involved in Bahia and probably well beyond the resources the state has available for environmental protection.

Third, in the past, the few preserved areas in the state were mostly national parks under the jurisdiction of IBAMA, a federal institution, over which the state had very little influence. IBAMA has suffered from serious institutional problems, such as lack of funding and personnel, for the last ten years. Thus, a sharp increase in the area and number of federally protected areas was unlikely. Fourth, the state environmental agency (CRA) alone could not do much to carry out a widespread policy of creating protected areas because it lacked the funds, the technical and institutional capacity, and the political capital. Therefore a new approach was necessary to bring the state into the process of protecting the environment in areas with tourism potential. As we will see, the creation of APAs and the involvement of various agencies have proved to be an alternative in overcoming some of the problems mentioned above.

4.1) Jurisdiction on Environmental Matters in Brazil and Bahia

The federal Constitution of 1988 states that state and federal governments have the authority to legislate environmental matters. The federal government establishes legislation stating general guidelines. The National Environmental Council (CONAMA) specifies more detailed policy guidelines for implementing federal legislation. States create specific legislation according to their needs, but must always follow federal guidelines.

Although the federal constitution does not mention that municipalities can also legislate on environmental matters, it does not stipulate the contrary. The federal constitution authorizes municipalities to enact legislation to achieve local interests, and these interests have been interpreted to include environmental resource protection (Oliveira & Ogata, 1998). However, environmental legislation at lower jurisdictional levels cannot contradict

13 IBAMA = Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis (Federal Environmental Agency). IBAMA is the federal agency in charge of the protected areas under federal jurisdiction.
15 CONAMA (Conselho Nacional do Meio Ambiente) defines national environmental policies through a series of resolutions that are based on federal laws or decrees (for example, CONAMA specifies the limits allowed for air and water pollutants). It is formed by members of the federal government, NGOs and labor and business representatives from the different parts of the country.
16 The Article 30, Brazilian Federal Constitution (1988), states that municipalities can:
   I – Legislate over any matter of local interest;
   II – Supplement federal and state legislation if necessary.
legislation passed at higher levels; that is, municipal legislation cannot be less stringent than state legislation, and state legislation cannot be less stringent than federal legislation.

Regarding land-use rules, the federal constitution declares that municipalities should promote controlled land occupation through planning, land-use control, land subdivisions, and urban land development rules. The state and federal governments do not directly regulate land use, but they can intervene in land use rules when environmental protection is involved, such as in the case of environmentally protected areas in Bahia.

4.2) Evolution of Brazilian Environmental Institutions

During the 1970s, Brazilian and international environmental groups started to protest Brazil’s failure to respond to some of its environmental problems, such as the deforestation of the Amazon, the widespread industrial pollution in Cubatão (State of São Paulo), and the agreement between Brazil and Germany to build a series of nuclear reactors. After the United Nations Conference on the Human Environment in Stockholm in 1972, the Brazilian federal government decided to create the Special Secretariat for the Environment in 1973. Many states, such as São Paulo and Rio de Janeiro, also decided to create their own environmental agencies. However, the staff of these national and state agencies was very limited in the beginning, and there was no comprehensive legislation or institutional structure to deal with most environmental problems (Loureiro and Pacheco, 1995).

In the 1980s, the legal and institutional structure for environmental policy and management was strengthened by the first comprehensive national environmental legislation: the National Environmental Policy in 1981. Also in the 1980s, the Ministry of Urban Development and the Environment was created (in 1985), and the National Environmental Council (CONAMA) was consolidated. In 1988, the environment received a special chapter in the new Brazilian Constitution. At the state level, the 1980s were also crucial. States and municipalities generated their own environmental legislation, and environmental agencies and councils were established or enhanced.

At the federal level, the ministry in charge of environmental affairs evolved into the Ministry of the Environment, Water Resources, and the Legal Amazon. Today, as states and municipalities have assumed responsibility for most aspects of environment policy, federal activity involves establishing some additional national environmental legislation and implementation guidelines, and providing states with funds to pursue environmental policies and projects. However, the federal government still exercises much control over some renewable resources (such as fisheries and national forests), and administers federal conservation units through the Federal Environmental Agency (IBAMA).

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17 During this time Brazil was under a military dictatorship (it lasted between 1964 and 1985).
18 Secretaria Especial do Meio Ambiente (SEMA) under the Ministry of Interior.
19 Conselho Nacional do Meio Ambiente (CONAMA) is directly linked to the Presidential Cabinet.
20 According to the terminology used by the Brazilian governmental institutions, the term Conservation Unit means any kind of protected area (including, National and State Parks, ecological station, APA etc.). The term Environmentally Protected Area (APA in Portuguese) is utilized to indicate one specific kind of Conservation Unit only (the one analyzed in my research).
In the non-governmental arena, total institutional capacity has also expanded. Since the country’s democratization, following the military dictatorship from 1964 and 1985, the number of NGOs in Brazil has grown significantly (Bernardes & Nanne, 1994), especially environmental NGOs (Viola, 1992). Following this pattern, the number of environmental NGOs in Bahia has increased impressively in the last two decades (see Table 4.1 and Figure 4.2), especially when compared with other states in the Northeast (see Table 4.2). Between 1985 and 1992, the number of NGOs grew from 5 to 40.

Many of these groups were created with specific objectives, such as defending a certain ecosystem or protesting against an environmental problem or disaster. For example, the Pro-Tamar Foundation was created to protect marine turtles, which were threatened almost to extinction by rapid occupation of the seashore.\(^{21}\) The Movement for the Defense of Sao Francisco River (MDSF) was established to mobilize the local population regarding environmental problems, such as pollution and sedimentation. Most of these NGOs act regionally or locally. Only few have links to NGOs in other states or countries.\(^{22}\) However, NGOs in Bahia are important in environmental decision making. Some of them (such as Gamba, Germen and Ascae) regularly denounce environmental degradation and actively participate in the decisions of the state environmental council (CEPRAM).

**Table 4.1 – Number of environmental NGOs in Bahia**

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Number of NGOs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>0</td>
</tr>
<tr>
<td>1981</td>
<td>2</td>
</tr>
<tr>
<td>1982</td>
<td>4</td>
</tr>
<tr>
<td>1983</td>
<td>4</td>
</tr>
<tr>
<td>1984</td>
<td>5</td>
</tr>
<tr>
<td>1985</td>
<td>7</td>
</tr>
<tr>
<td>1986</td>
<td>9</td>
</tr>
<tr>
<td>1987</td>
<td>11</td>
</tr>
<tr>
<td>1988</td>
<td>14</td>
</tr>
<tr>
<td>1989</td>
<td>21</td>
</tr>
<tr>
<td>1990</td>
<td>27</td>
</tr>
<tr>
<td>1991</td>
<td>35</td>
</tr>
<tr>
<td>1992</td>
<td>40</td>
</tr>
</tbody>
</table>


---

\(^{21}\) It has government support through links with the Federal Environmental Agency (IBAMA) and the Brazilian state oil company (Petrobras). Pro-Tamar Foundation has successfully expanded its activities over the years. Today, it acts in several coastal states.

\(^{22}\) Besides Pro-Tamar Foundation, I have identified only two NGOs that operate statewide (Gamba and Germen) through my field research. Out of these two, Gamba has wider contacts outside the state and participates in national environmental forums (for instance, Gamba is part of the NGO national network to defend the preservation of the Atlantic Forest).
Total Number of Environmental NGOs in Bahia over Time

**Figure 4.2 - Total Number of Environmental NGOs in Bahia over Time**
Table 4.2 – Number of environmental NGOs in the states of the Brazilian Northeast

<table>
<thead>
<tr>
<th>State</th>
<th>Number of NGOs per one million inhabitants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bahia</td>
<td>3.9</td>
</tr>
<tr>
<td>R. G. Norte</td>
<td>2.9</td>
</tr>
<tr>
<td>Pernambuco</td>
<td>1.7</td>
</tr>
<tr>
<td>Paraiba</td>
<td>1.3</td>
</tr>
<tr>
<td>Alagoas</td>
<td>1.2</td>
</tr>
<tr>
<td>Maranhao</td>
<td>1</td>
</tr>
<tr>
<td>Ceara</td>
<td>0.9</td>
</tr>
<tr>
<td>Sergipe</td>
<td>0</td>
</tr>
</tbody>
</table>


In Bahia, policy guidelines to implement state legislation are specified by the State Environmental Council (CEPRAM). CEPRAM has functioned since 1972 and is the first state environmental council created in Brazil. It is in charge of the main decisions concerning environmental policy at the state level (see Table 4.3 for the main responsibilities of CEPRAM). One-third of its members are from governmental agencies, one-third are representatives of entrepreneurs and workers, and one-third are representatives of environmental NGOs (see 1998 composition at Table 4.4). Certain kinds of development projects over a certain size have to be approved by CEPRAM to gain a state development permit. CEPRAM members convene once a month to screen important development projects and discuss the introduction of environmental policies based on state laws and decrees. Recently modernized, with the public given access to its processes, CEPRAM has analyzed an increasing number of projects and polices (see Table 4.5 and Figure 4.3 for the number of projects analyzed by CEPRAM). The public agency in charge of implementing environmental policies is the Center for Environmental Resources (CRA), which is under the State Secretariat of Planing, Science and Technology (SEPLANTEC – Secretaria de Planejamento, Ciência e Tecnologia).

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23 CEPRAM = Conselho Estadual de Meio Ambiente (State Environmental Council).
Table 4.3 – Responsibilities of the State Environmental Council (CEPRAM)

<table>
<thead>
<tr>
<th>Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>I – Elaborate the state environmental policy,</td>
</tr>
<tr>
<td>II – Approve projects of the state public institution that affect the conservation,</td>
</tr>
<tr>
<td>defense or quality of the environment,</td>
</tr>
<tr>
<td>III – Exert preventive and corrective coercive powers necessary to the conservation,</td>
</tr>
<tr>
<td>defense or quality improvement of the environment,</td>
</tr>
<tr>
<td>IV – Approve licenses for locating, implementing and operating projects with potential</td>
</tr>
<tr>
<td>environmental impacts,</td>
</tr>
<tr>
<td>V – Demand studies to analyze specific situations of possible environmental</td>
</tr>
<tr>
<td>degradation,</td>
</tr>
<tr>
<td>VI – Advise on scientific and technological state policy,</td>
</tr>
<tr>
<td>VII – Demand denounces of potential environmental degradation from identifiable</td>
</tr>
<tr>
<td>sources,</td>
</tr>
<tr>
<td>VII – Determine the maximum standards for pollutants statewide.</td>
</tr>
</tbody>
</table>


Table 4.4 – The fifteen representatives of the State Environmental Council (CEPRAM)

<table>
<thead>
<tr>
<th>Public Agencies:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Secretary of Planning, Science and Technology (SEPLANTEC)</td>
</tr>
<tr>
<td>• Secretary of Water Resources, Sanitation and Housing</td>
</tr>
<tr>
<td>• Secretary of Agriculture, Irrigation and Agrarian Reform</td>
</tr>
<tr>
<td>• Secretary of Industry, Commerce and Tourism</td>
</tr>
<tr>
<td>• Secretary of Health</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Five Environmental Non-governmental Organizations elected in the General NGO Assembly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Members of Unions:</td>
</tr>
<tr>
<td>• Representative of Bahia Federation of Industries (FIEB)</td>
</tr>
<tr>
<td>• Representative of the Industry Labor Union (FTIBA)</td>
</tr>
<tr>
<td>• Representative of Bahia Agriculture Federation (FAEBA)</td>
</tr>
<tr>
<td>• Representative of the Agriculture Labor Union (FETAG)</td>
</tr>
<tr>
<td>• Representative of professional association (e.g., Engineering and Architecture State Council)</td>
</tr>
</tbody>
</table>


Table 4.5 – Number of processes analyzed by CEPRAM over time

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Processes Analyzed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>94</td>
</tr>
<tr>
<td>1995</td>
<td>118</td>
</tr>
<tr>
<td>1996</td>
<td>154</td>
</tr>
<tr>
<td>1997</td>
<td>236</td>
</tr>
</tbody>
</table>

Since the beginning of the 1990s, another group of public actors has expanded its role in environmental protection: public prosecutors (similar to U.S. district attorneys). According to the Constitution, public prosecutors “should promote inquiries and public processes in order to protect the environment and other public or collective interests.” In Bahia, the state court system created a department of public prosecutors specializing in environmental law. These prosecutors have initiated several cases against individuals, companies, and state and municipal agencies, sometimes contesting development permits and environmental management in APAs.

The institutional structure for establishing Brazilian environmental policy is undergoing transition. Most of the states (including Bahia) hold most of the responsibility for environmental protection. As some municipalities create additional institutional and legal capacity to cope with certain environmental matters, states transfer responsibilities to them.

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(for example, responsibility for noise control has been transferred to a few municipalities in Bahia, mainly the largest cities). However, most of the municipalities in Bahia have little or no institutional or legal apparatus for environmental protection. Some environmental responsibilities have also shifted to other state agencies (e.g., some conservation units are under the State Agriculture Secretariat).

Because of all these institutional transitions, public accountability for environmental protection can be often weak in Brazil (Ames & Keck, 1997). Sometimes no public agency claims responsibility for certain environmental problems (Oliveira and Ogata, 1998). Other times more than one public agency is involved in an environmental matter, so responsibilities overlap. Although municipalities control land use according to the federal constitution, many municipalities have no institutional apparatus to implement land-use controls. In Bahia, of more than 400 municipalities, only Salvador has prepared a master plan. Furthermore, federal and state governments issue environmental legislation specifying land-use rules that municipalities are supposed to follow, such as coastal management plans. However, many municipalities have different land-use regulations or lack the institutional apparatus to implement these upper-level regulations, so they rarely implement them.

In a recent case brought by public prosecutors in Bahia, the construction company MRM started a development project in the Abaete APA in Salvador with authorization from the municipal government. However, this project would have broken several APA land-use rules. The municipality had granted permission for the project without consulting state authorities. As result, public prosecutors are suing MRM and the municipal government (A. Tarde, 1997; and Ministério Público Federal, 1997).

4.3) Conservation Units

The nineteenth-century U.S. concept of national parks motivated influential personalities to suggest similar kind of policies in Brazil (Padua, 1987). In 1876, André Rebouças, a well-known engineer and public administrator, proposed creating two national parks: one surrounding the Sete Quedas waterfall, and another on the Bananal fluvial island. Rebouças’s proposals did not receive much political support. However, the idea of preserving natural resources through protected areas resurfaced in the mid-1930s with debates over the first forest code. This code, approved in 1934, defined three kinds of protected areas: national parks, national forests, and protected forests.

In 1937, the first national park was created: the Itatiaia National Park, a forested mountain chain used as a vacation refuge for many well-to-do citizens from Sao Paulo and Rio de Janeiro, then the Brazilian capital. The objective underlying creation of these parks was preservation of unique natural areas with scenic and scientific value (WWF, 1994, quoting the Brazilian Constitution of 1937).

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25 This was the case until 1999, according to interviews with public officials in Conder.
26 This area was inundated in the 1970s by the creation of the dam for Itaipu Hydropower Unit.
27 Bananal is the largest fluvial island in the world. Today, it is protected under the Araguaia National Park created in 1980.
28 These three kinds of areas could also be created by state or municipal governments.
The federal government created several more protected areas until the establishment of a new forest code in 1965 (Table 4.6). This code divided protected areas into two groups. No resources could be exploited in the first group (National Parks and Biological Reserve). In the second group, protected areas would be used for economic or social objectives (National Forests). The new code also defined areas under permanent preservation, which included several categories of ecosystems such as land abutting water bodies and steep terrain (Governo do Estado da Bahia, 1998).

The next significant legislative change occurred in 1981, when a law established two other kinds of protected areas: ecological stations and environmentally protected areas (APAs). From that point on, distinctions among so many kinds of protected areas began to blur, as presidential decrees created four other categories of protected areas from 1984 to 1990: ecological reserves, areas of relevant ecological interest, extractivist reserves, and private reserves. However, the number of protected areas grew significantly, to 142 by 1991 (Table 4.7).

The new categories were created mostly by bureaucrats in the Brazilian Institute of Forest Development (IBDF), an obscure federal agency. Sometimes these officials created a new kind of protected area to account for the characteristics of a type of region not yet covered. Rivalries among different federal bureaucracies also stimulated the creation of new categories. For example, an ecological station was not very different from a biological or ecological reserve. However, the former category was created because officials in the Federal Secretariat for the Environment (SEMA) wanted to establish their own protected areas without interference from the other federal environmental bureaucracy, the Brazilian Institute of Forest Development (IBDF), which SEMA considered pro-timber interests. By establishing a new category, SEMA could prevent over 3.2 million hectares of primary forests from falling into the hands of timber companies (Nogueira Neto, 1992).

Environmental NGOs participated in the National Environmental Council (CONAMA) when it was established in 1981, but their influence was limited while Brazil was under military dictatorship (until 1985), as political dissent during that period was uncommon and punishable.

In 1987, the National Environmental Council (CONAMA) made an attempt to streamline the classification system of publicly protected areas by defining ten categories. CONAMA and government agencies discussed these categories before submitting the National System of Conservation Units (SNUC) for approval by the National Congress in 1992. Debates over these formal categories for protected areas (or conservation units, as SNUC calls them) have lasted several years, but SNUC is expected to gain approval in 2000.

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29 Biological reserves are areas of strict entrance, used mainly for protecting certain fauna and flora.

30 Biological stations were created to protect samples of certain ecosystems for ecological studies.

31 These categories are Ecological Stations, Ecological Reserves, Environmentally Protected Areas (APAS), National, State and Municipal Parks, Biological Reserves, National, State and Municipal Forests, Natural Monuments, Botanic Gardens, Zoos and Forest Gardens (WWF, 1994).
Table 4.6 – Kinds of protected areas in the forest legislation of 1934

<table>
<thead>
<tr>
<th>Kind of Protect Area</th>
<th>Definition</th>
<th>Number created from 1934 to 1960</th>
<th>Number created from 1960 to 1965</th>
<th>Number created from 1934 to 1965</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Park</td>
<td>Public land (or, if private, the land should be expropriated). No development is allowed.</td>
<td>06</td>
<td>10</td>
<td>16</td>
</tr>
<tr>
<td>National Forest</td>
<td>Forest reserves on public lands held for future exploitation.</td>
<td>02</td>
<td>01</td>
<td>20</td>
</tr>
<tr>
<td>Protected Forest</td>
<td>Reserves on private land that can be exploited only with government permission.</td>
<td>15</td>
<td>05</td>
<td>03</td>
</tr>
</tbody>
</table>

Source: WWF (1994)

Table 4.7 – Number of protected areas in Brazil (1991)

<table>
<thead>
<tr>
<th>Category of Protected Area</th>
<th>Number (1991)</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Park</td>
<td>34</td>
</tr>
<tr>
<td>Biological Reserve</td>
<td>23</td>
</tr>
<tr>
<td>Ecological Stations</td>
<td>21</td>
</tr>
<tr>
<td>Ecological Reserves</td>
<td>06</td>
</tr>
<tr>
<td>Environmentally Protected Areas</td>
<td>16</td>
</tr>
<tr>
<td>National Forests</td>
<td>38</td>
</tr>
<tr>
<td>Extractivist Reserves</td>
<td>04</td>
</tr>
</tbody>
</table>

Source: WWF (1994)

The federal constitution suggests that “public institutions” can set aside conservation areas. All three levels of government (federal, state, and municipal) can designate parts of their territories as “conservation units.” The National System of Conservation Units (SNUC), still under debate, defines the following conservation units:

- biological reserves
- national, state, and municipal parks
- natural monuments
- wildlife refuges
- reserves of natural resources
- fauna reserves
- environmentally protected areas (APAs)
- national, state, and municipal forests
- extractive reserves

These categories accomplish different objectives (see Table 4.8), and each has its own rules regarding land use, property rights, administration, and environmental management structure. For example, in some conservation units, such as national and state parks, almost no development is allowed, and private land should be expropriated and landowners compensated. In other categories, such as environmentally protected areas (APAs), expropriation is not necessary and certain kinds of development are allowed. Because of their flexibility regarding land use and property rights, APAs have become one of the most popular conservation units (Corte, 1995).
Table 4.8 – Kinds of Conservation Units in Brazil and their objectives

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Ecological Reserve</th>
<th>National Parks</th>
<th>Natural Monument</th>
<th>Wildlife Refuge</th>
<th>Reserve of Natural Resources</th>
<th>Fauna Reserve</th>
<th>APA</th>
<th>National Forest</th>
<th>Reserve for Extractivism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preserve biological diversity</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Preserve/restore samples of ecosystems</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Protected endangered or endemic species</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Preserve fauna and flora</td>
<td></td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Manage fauna and flora resources</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Protect landscape</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protect water resources</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Allow scientific research</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Allow environmental education</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td></td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Propitiate recreation</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td></td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Contribute for environmental monitoring</td>
<td>1</td>
<td>1</td>
<td></td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Allow sustainable use of resources</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Stimulate regional development</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Serve as buffer zone</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>1</td>
<td></td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Preserve resources for the future</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 = primary objective, 2 = secondary objective, 3 = wherever is possible
4.4) Environmentally Protected Areas (APAs)

The term APA (environmentally protected area, or Área de Proteção Ambiental in Portuguese) was created by law number 6,902 in 1981. The term is also included in the 1981 legislation establishing national environmental policy. The National Environmental Council defines APAs as “areas destined to preserve the environmental quality and natural resources in a certain region in order to improve the quality of life of the local population and to protect regional ecosystems” (resolution number 10, 1988). An APA is administered under a zoning system that specifies areas for different uses, such as preservation, tourism development, and urban settlement. Zoning is supposedly created based on input from local communities, NGOs, and local governments. Restrictions on a variety of development projects, such as certain industries and urbanization projects, are also included in APA guidelines (see Appendix 5).

In ideal terms, the creation of a state APA would transfer certain development rights in one region from private landowners and municipal governments to a management council under a plan coordinated by one or more state agencies. Such a council would be composed of state and municipal governments and members of the local civil society. APAs permit a broader involvement of the state government, local community groups, and civil society in land-use rules, usually controlled by municipal governments. Moreover, contrary to the situation in areas of strict preservation, such as state or national parks, no land expropriation is actually necessary to create an APA, thus reducing the costs associated with buying land as well as possible conflicts with private landowners.

4.5) Rules for Establishing APAs in Bahia

Establishment of environmentally protected areas (APAs) in Bahia entails a series of stages (see Figure 4.4). First, a state or municipal government institution proposes creation of an APA. This proposal usually includes only general guidelines regarding the protected area, such as geographical limits and the reasons for creating the APA. The latter could include, for example, protecting a fragile ecosystem or controlling the environmental impacts of one or more development projects.

Second, the proposal is screened by the state environmental agency (CRA). CRA officials analyze the feasibility of creating an APA in terms of the importance of the ecosystems involved and their state of preservation. CRA officials can informally negotiate APA limits with the proposing institution. Once CRA approves these guidelines, the state government issues a decree officially creating the APA (see Appendix 6 for an example). This decree is then screened by the state legislature (no decree has been rejected by any state legislature so far). Later developments concerning the APA need the approval of the APA administrator and CEPRAM in some cases.

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32 In the last three terms (since 1990), the party coalition in power has elected the majority of the state assembly, as well as the large majority of the members of local governments.
One government institution (state or municipal) proposes the creation of an APA

The State Environmental Agency (CRA) screens the proposal for approval

Ok

The state/municipal government submits a proposal for state/municipal legislature to make the APA guidelines a decree or law

Ok

The institution that proposed the creation of the APA has to elaborate an APA management plan

The State Environmental Agency (CRA) screens the management plan

Ok

The management plan is sent to the State Environmental Council (CEPRAM) for approval

Ok

The institution that proposed the APA implements the plan at local level and defines the APA management council formed by members of the government and civil society

The management council can review the management plan after few years

Proposal rejected

FIGURE 4.4 – STAGES IN ESTABLISHING AN ENVIRONMENTALLY PROTECTED AREA (APA)
After an APA is created by state legislation, state agencies, with the involvement of local governments and populations, must coordinate preparation of a management plan, which must be approved by the state environmental council (CEPRAM). Management plans usually consist of three elements. First is an economic-ecological assessment, which includes an evaluation of the environmental and social features of the protected region. Second is a zoning and environmental protection plan, and third is a structure for implementing, monitoring, and enforcing the APA environmental guidelines. Subsequent developments in the APA must follow the zoning rules and environmental guidelines.

The economic-ecological assessment describes the economic, social, and environmental characteristics of the region that is the target of the proposed APA. All ecosystems and their state of preservation are studied in detail, and the main species of fauna and flora identified. This assessment also includes an economic and social evaluation of the region within and around the APA encompassing local population groups, the main patterns of land development (urban and rural) and their trends, and their effects on ecosystem conservation.

The second element of the management plan uses information from the economic-ecological assessment to specify zoning rules regulating land use in the different APA zones. Restrictions on the kind, size, and density of development, and the infrastructure necessary for overseeing the development, vary in each zone. For example, the Tinhare-Boipeba APA contains 17 kinds of zones (see Table 4.9). These include, for example, a strict preservation zone, where no development is allowed and human access is limited, a zone for controlled urbanization, and a zone reserved for low-density tourism.
<table>
<thead>
<tr>
<th>Zone Name</th>
<th>Description</th>
<th>Kind of Ecosystem</th>
<th>Uses Permitted</th>
<th>Restrictions</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZPR</td>
<td>Zone for Strict Preservation (ZONA DE PROTEÇÃO RIGOROSA)</td>
<td>Mangroves, estuaries, coral reefs, dunes, lakes, lagoons, waster springs, alluvial forests, caves, swamps, turtle hatching areas, eroded areas and areas with risk of landslides</td>
<td>- Controlled visitation for nature spotting</td>
<td>- Any human activity that implies significant impact on the ecosystem</td>
</tr>
<tr>
<td>ZPVS</td>
<td>Zone for Wildlife Protection (ZONA DE PROTEÇÃO DA VIDA SILVESTRE)</td>
<td>Zona de Proteção do Hatching (ZONADEPROTEÇÃO DA VIDA SILVESTRE)</td>
<td>- Authorized Scientific Research</td>
<td>- No human presence except for research and maintenance</td>
</tr>
<tr>
<td>ZME</td>
<td>Zone for Special Management (ZONA DE MANEJO ESPECIAL)</td>
<td>Swamp, Alluvial lands, areas with high subterranean water bed</td>
<td>- Scientific research</td>
<td>- Any activity that compromises the water natural flow</td>
</tr>
<tr>
<td>ZOM</td>
<td>Coastal Zone (ZONA DE ORLA MARÍTIMA)</td>
<td></td>
<td>- Sight-seeing</td>
<td>- Roads</td>
</tr>
<tr>
<td>ZPV</td>
<td>Zone of Visual Beauty (ZONA DE PROTEÇÃO VISUAL)</td>
<td>Dunes and hills</td>
<td>- Sight-seeing</td>
<td>- Traffic of Vehicles</td>
</tr>
</tbody>
</table>

Table 4.9 – 17 Kinds of Zones in Tinhare-Boipeba APA
### Table 4.9 – 17 Kinds of Zones in Tinhare-Boipeba APA (Second Page)

<table>
<thead>
<tr>
<th>Zone Name</th>
<th>Description</th>
<th>Kind of Ecosystem</th>
<th>Uses Permitted</th>
<th>Restrictions</th>
</tr>
</thead>
</table>
| **ZPV(E)** | Corresponds to dunes and hills with good state of preservation and proper for low density tourism development | Dunes and Hills | - Site-seeing  
- Trekking trails  
- Residential land plots  
Minimum area: 10.000 m²  
Ip: 0,8  
- Maximum number of stores: 2  
Maximum density: 250 m² / inhab  
- Commercial Plots  
Minimum area: 20.000 m²  
Ip: 0,8  
Maximum number of stores: 02  
Maximum density: 250 m² / inhab | - Traffic of vehicles on the dunes  
- Permanent construction structures on terrain with declivity over 45 degrees  
- Cutting down coconut trees (except with authorization of the APA management body)  
- Constructions without proper sanitation structure  
- All constructions should have an Environmental Impact Statement |
| **ZOR** | Corresponds to coastal areas with potential for tourism development | Marine and fluvio-marine terraces | - Residential land plots  
Minimum area: 3.000 m²  
Ip: 0,8  
Maximum number of stores: 2  
Maximum density: 250 m² / inhab  
- Commercial Plots  
Minimum area: 20.000 m²  
Ip: 0,8  
Maximum number of stores: 02  
Maximum density: 250 m² / inhab | - Significant change in landscape, fauna or flora  
- Building without proper sanitation system |
| **ZUR** | Corresponds to the traditional communities. In Tinhare-Boipeba APA, these are: Galéu, Garapuú, Pedrinhas, Cachoeirinha, Canavieiras, Morcê e São Sebastião. | Marine and Fluvio-marine terraces and hills | - Single-family residential plots. Small business that conserve traditional characteristics | Development projects that alter the traditional urban structure and culture |
| **ZEV** | Corresponds areas where the local population extracts plants for domestic or commercial use. In the case of Tinhare-Boipeba APA, these are forested areas with straw in Tinhare Island | Forests containing straws on fluvio-marine terraces and hills | - Controlled extraction of straw  
- Traditional economic activities  
- Subsistence agriculture  
- Low-density Tourism development project  
Minimum area: 500.000 m²  
Ip: 0,9  
Maximum number of stores: 02  
Maximum density: 250 m² / inhab | Deforestation |
| **ZEA** | Corresponds to areas where the local population traditionally extracts crabs | Mangroves | Controlled extractivism | Any activity that alters the ecosystem significantly |
| **ZT** | Corresponds to areas designated for tourism development | Marine terraces and hills | - Residential land plots  
Minimum area: 1.000 m²  
Ip: 0,7  
Maximum number of stores: 2  
- Plots for Tourism projects  
Minimum area: 5.000 m²  
Ip: 0,7  
Maximum number of stores: 02 | Construction without proper solutions for sewage and solid waste (project reviewed by the APA administrator) |
<table>
<thead>
<tr>
<th>Zone Name</th>
<th>Description</th>
<th>Kind of Uses Permitted</th>
<th>Uses Permitted</th>
<th>Restrictions</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZT(E) Especial Zone for Tourism Development (ZONA TURÍSTICA ESPECIAL)</td>
<td>Corresponds to areas having small declivity and potential for low-density tourism</td>
<td>- Residential land plots</td>
<td>Minimum area: 2,000 m²</td>
<td>Construction without proper solutions for sewage and solid waste (project reviewed by the APA administrator)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Fluvio-marine terraces and hills</td>
<td>Maximum density: 250 m² / inhab.</td>
<td></td>
</tr>
<tr>
<td>ZUC Zone for Controlled Urbanization (ZONA DE URBANIZAÇÃO CONTROLADA)</td>
<td>Corresponds to areas with lack of infrastructure and uncontrolled tourism development and urbanization. In the case of Tinhare-Boipeba APA, these are morro de São Paulo, Gamboa e Velha Boipeba.</td>
<td>- Commercial, public and residential land plots</td>
<td>Minimum area: 250 m²</td>
<td>- Environmental legislation and land subdivision regulation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Hills - Dunes - Fluvio-marine terraces</td>
<td>Maximum number of stores: 2</td>
<td>- Construction must have solutions for sewage treatment and disposal</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Plots for tourism projects</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Minimum area: 1,200 m²</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Ip: 0,6</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Maximum number of stores: 02</td>
<td></td>
</tr>
<tr>
<td>ZEP(I) Zone for Urban Expansion I (ZONA DE EXPANSÃO I)</td>
<td>Corresponds to areas for urban expansion near the villages of morro de São Paulo, Gamboa e Velha Boipeba.</td>
<td>Hills</td>
<td>- Commercial, public and residential land plots</td>
<td>- Environmental legislation and land subdivision regulation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Minimum area: 300 m²</td>
<td>- Construction must have solutions for sewage treatment and disposal</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Ip: 0,5</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Maximum number of stores: 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Plots for tourism projects</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Minimum area: 1,500 m²</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Ip: 0,6</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Maximum number of stores: 02</td>
<td></td>
</tr>
<tr>
<td>ZEP(II) Zone for Urban Expansion II (ZONA DE EXPANSÃO II)</td>
<td>Corresponds to areas for urban expansion near the villages of Morro de São Paulo, Gamboa and Cairu.</td>
<td>Fluvio-marine terraces and hills</td>
<td>- Commercial, public and residential land plots</td>
<td>- Environmental legislation and land subdivision regulation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Minimum area: 600 m²</td>
<td>- Construction must have solutions for sewage treatment and disposal</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Ip: 0,5</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Maximum number of stores: 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Plots for tourism projects</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Minimum area: 2,000 m²</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Ip: 0,6</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Maximum number of stores: 02</td>
<td></td>
</tr>
<tr>
<td>ZAG Zone for Agricultural Activities (ZONA AGRÍCOLA)</td>
<td>Corresponds to areas containing agricultural activities and extractivism</td>
<td>Marine and fluvio-marine terraces and hills</td>
<td>- Agriculture</td>
<td>- Use of pesticides prohibited by environmental regulations</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Controlled extractivism</td>
<td>- Land subdivisions</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Traditional economic activities (e.g., handicrafting)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Residential and tourism land plots</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Minimum area: 20,000 m²</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Ip: 0,8</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Maximum number of stores: 02</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Maximum density: 250 m² / inhab.</td>
<td></td>
</tr>
<tr>
<td>ZRA Zone for Environmental Restoration (ZONA DE RECUPERAÇÃO AMBIENTAL)</td>
<td>Corresponds to areas suffering from erosion caused by natural or human factors. In the case of Tinhare-boipeba APA, these are located at the northwest part of Tinhare Island</td>
<td>Fluvio-marine terraces and hills</td>
<td>- Environmental restoration</td>
<td>Construction until the restoration is finished</td>
</tr>
</tbody>
</table>
Environmental planning is coordinated by government agencies in charge of the APA. These agencies perform all the technical work when they have the institutional capacity, and hire consultants to complete the tasks they cannot perform. In their early stages, APAs are administered by one of several state government agencies, but some activities may be decentralized to regional and municipal levels as the process advances, so the latter can assume responsibility for ongoing administration. In the later stages of the process, the state agency in charge of administering the APA planned to create a management council formed mostly by local interests such as landowners, municipal governments, NGOs, religious leaders, community leaders, and workers. This council can make decisions concerning development within the APA while observing the zoning guidelines in the management plan approved by the state environmental council (CEPRAM). The state environmental agency (CRA) or municipal government has responsibility for supervising land-use decisions, enforcing the environmental guidelines for any development project, and investigating complaints about the use of environmental resources.

For example in the case of Itacare APA in the municipalities of Itacaré and Uruguca, the APA administrator within the State Secretariat of Culture and Tourism plans to create a management council formed by members of government and civil society (Governo da Bahia, 1998). Some members will be permanent and others changeable, as determined by the APA administrator. The members would include representatives of the following:

Permanent members:
- State Secretariat of Culture and Tourism
- Government of the municipality of Itacaré
- Government of the municipality of Uruguca
- State Environmental Agency (CRA)
- City Council of Itacaré
- City Council of Uruguca

Temporary members:
- State Department of Forest Development (DDF)
- State Company of Regional Development (CAR)
- State Land Institute (Interba)
- State Fishing Company (Bahiapesca)
- State Policy (PM)
- Federal Environmental Agency (IBAMA)
- Grama : Group for Environmental Restoration (NGO)
- IESB : Institute for Social and Environmental Studies in Southern Bahia (NGO)
- Boto Negro Ecological Group (NGO)
- FUNBAP: Pau-Brasil Foundation (NGO)
- Commercial Association of Itacare
- Squatters’ Association
- AFIR: Association of People from Itacare (NGO)

Funding for establishing the APA comes from the agency that proposes its creation. This agency can request supplementary funding in its budget from the state treasury fund, use its own financial resources, or find sponsors in the private or non-governmental sector.

4.6) The Outcome

In the past decade the State of Bahia in the Brazilian Northeast has aggressively implemented a policy of creating environmentally protected areas in regions with potential for tourism development. The number of APAs and the area covered by them have grown significantly (Figure 4.5). In less than ten years, the number of APAs in Bahia increased by more than 1,200 percent – from 2 APAs in 1990 to 27 APAs in 1998. The area covered by APAs expanded 130 times, from 13,700 hectares in 1990 to 1,783,141 hectares in 1998. Most of the established APAs are located on the coast (see Figure 4.6 for APA location and Table 4.10 for name, date of creation, and current status of all APAs).

Two main objectives led the government of Bahia to create environmentally protected areas (APAs). The first was to preserve important, fragile ecosystems in regions undergoing rapid development, especially tourism development on the coast. In general, APAs created for this reason have very restrictive zoning rules, allowing only low-impact development. Mangue Seco and Abaete APAs are examples of this kind of APA.

The second objective was to use APAs to mitigate environmental impacts of large development projects such as roads. Many of these projects were part of the state tourism development plan. These APAs are usually large, sometimes encompassing more than 100,000 hectares, and their zoning system is less restrictive. These areas sometimes include several urbanized areas and territories in several municipalities. Examples of this type are North Coast and Santo Antonio APAs.
The management of these APAs is under the control of several state agencies and
municipal governments. At the state level, the agencies in charge of coordinating the process
of creating, planning, and managing APAs until 1999 were CRA and CONDER, both
under the Secretariat of Planning, Science and Technology (SEPLANTEC), and Bahiatursa,
under the State Secretariat of Culture and Tourism (Sectur). This decentralization of APA
policy primarily accounts for the ability of the state to create such large number of APAs, as
chapter 5 explains.

(Source: CRA, October 1998)

FIGURE 4.5 - APAS IN BAHIA STATE

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33 CRA = Centro de Recursos Naturais (Center for Natural Resources). CRA is the environmental agency of the State of Bahia in charge of enacting and enforcing environmental regulations. It is under the Secretariat of Planning, Science and Technology (SEPLANTEC).
34 CONDER = Companhia de Desenvolvimento da Região Metropolitana (Company for the Development of the Metropolitan Region). It is the state agency in charge of planning for Salvador, the state capital, and surrounding urban areas. It is also under SEPLANTEC jurisdiction.
35 Bahiatursa = Bahia Turismo S.A. (Bahia Tourism Authority, agency for coordination of tourism development). Bahiatursa is in charge of tourism promotion and planning in the State of Bahia. It is linked to the State Secretariat of Culture and Tourism (Sectur).
<table>
<thead>
<tr>
<th>No.</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Lagos e Dunas do Abaetê</td>
</tr>
<tr>
<td>02</td>
<td>Mangue Seco</td>
</tr>
<tr>
<td>03</td>
<td>Costa de Itacaré/Serra Grande</td>
</tr>
<tr>
<td>04</td>
<td>Guaibim</td>
</tr>
<tr>
<td>05</td>
<td>Ilhas Tinhari/Boipeba</td>
</tr>
<tr>
<td>06</td>
<td>Bacia do Rio de Janeiro</td>
</tr>
<tr>
<td>07</td>
<td>Marimbus/Iraquara</td>
</tr>
<tr>
<td>08</td>
<td>Litoral Norte</td>
</tr>
<tr>
<td>09</td>
<td>Bacia Hidrog. Joanes</td>
</tr>
<tr>
<td>10</td>
<td>Caraiva/Trancoso</td>
</tr>
<tr>
<td>11</td>
<td>Coroa Vermelha</td>
</tr>
<tr>
<td>12</td>
<td>Rio Capivara</td>
</tr>
<tr>
<td>13</td>
<td>Cachoeira de Pancada</td>
</tr>
<tr>
<td>14</td>
<td>Grande</td>
</tr>
<tr>
<td>15</td>
<td>Lagoa Encantada</td>
</tr>
<tr>
<td>16</td>
<td>Lagoa de Guarajuba</td>
</tr>
<tr>
<td>17</td>
<td>Serra do Barbado</td>
</tr>
<tr>
<td>18</td>
<td>Ponta da</td>
</tr>
<tr>
<td>19</td>
<td>Baleia/Abrolhos</td>
</tr>
<tr>
<td>20</td>
<td>Gruta dos Brejões/Veredas do Romão</td>
</tr>
<tr>
<td>21</td>
<td>Lagoa de Itaparica</td>
</tr>
<tr>
<td>22</td>
<td>Dunas e Veredas do Baixo</td>
</tr>
<tr>
<td>23</td>
<td>Médio São Francisco</td>
</tr>
<tr>
<td>24</td>
<td>Cavalo</td>
</tr>
<tr>
<td>25</td>
<td>Recife das Pinhais</td>
</tr>
<tr>
<td>26</td>
<td>Lagoa CCC</td>
</tr>
<tr>
<td>27</td>
<td>Serra das Candeias</td>
</tr>
<tr>
<td>28</td>
<td>Itapebi</td>
</tr>
<tr>
<td>29</td>
<td>Península de Marau</td>
</tr>
</tbody>
</table>

**FIGURE 4.6 - LOCATION OF APAS IN BAHIA.**

APAs in **bold letters** were selected as case studies for this research (see Chapter 6).
(Source: CRA, 1999).
<table>
<thead>
<tr>
<th>Name of the APA</th>
<th>Kind and Date of the Decree of Creation</th>
<th>Municipalities Involved</th>
<th>Administrator until Dec. 1998</th>
<th>Area (1,000 hectares)</th>
<th>Management Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Gruta dos Brejões/Veredas do Romão Gramacho</td>
<td>State Decree number 32.487 of 13.11.85</td>
<td>Morro do Chapéu, São Gabriel and João Dourado</td>
<td>CRA*</td>
<td>11.900</td>
<td>In Progress</td>
</tr>
<tr>
<td>2. Lagoas e Dunas do Abaetê</td>
<td>State Decree number 351 of 22.09.97</td>
<td>Salvador</td>
<td>CONDER*</td>
<td>1.800</td>
<td>Existing</td>
</tr>
<tr>
<td>3. Lagoa Guaraúba</td>
<td>State Decree number 100 of 04.06.91</td>
<td>Camaçari, Simões Filho and Lauro de Freitas</td>
<td>CONDER</td>
<td>5.022</td>
<td>Non-existent</td>
</tr>
<tr>
<td>4. Bacia Hidrográfica do Joanes I</td>
<td>State Decree number 605 of 06.11.91</td>
<td>Jandaíra</td>
<td>CRA</td>
<td>3.395</td>
<td>Existing</td>
</tr>
<tr>
<td>5. Mangue Seco</td>
<td>State Decree number 1.046 of 17.03.92</td>
<td>Jandaíra, Esplanada, Conde, Entre Rios and Mata de São João</td>
<td>CONDER</td>
<td>142.000</td>
<td>Existing</td>
</tr>
<tr>
<td>6. Litoral Norte</td>
<td>State Decree number 1.164 of 11.05.92</td>
<td>Valença</td>
<td>CRA</td>
<td>2.000</td>
<td>Existing</td>
</tr>
<tr>
<td>7. Guaibim</td>
<td>State Decree number 1.240 of 05.06.92</td>
<td>Cairú</td>
<td>CRA</td>
<td>43.300</td>
<td>Existing</td>
</tr>
<tr>
<td>8. Tinhare/Bopiba</td>
<td>State Decree number 1.494 of 13.05.93</td>
<td>Ituberá</td>
<td>Municipality of Ituberá</td>
<td>50</td>
<td>Non-existent</td>
</tr>
<tr>
<td>9. Cachoeira de Pancada Grande</td>
<td>Municipal Law 23 of 04.06.93</td>
<td>Candeias</td>
<td>Municipality of Candeias</td>
<td>189</td>
<td>Non-existent</td>
</tr>
<tr>
<td>10. Lagoa da CCC</td>
<td>State Decree number 2.183 of 07.06.93</td>
<td>Abaira, Piatá, Rio de Contas, Rio do Pires and Érico Cardoso</td>
<td>CODETUR*</td>
<td>63.652</td>
<td>Existing</td>
</tr>
<tr>
<td>11. Serra do Barbado</td>
<td>State Decree number 2.184 of 07.06.93</td>
<td>Porto Seguro and Santa Cruz de Cabrália</td>
<td>CODETUR</td>
<td>4.100</td>
<td>Existing</td>
</tr>
<tr>
<td>12. Coroa Vermelha</td>
<td>State Decree number 2.185 of 07.06.93</td>
<td>Barreiras</td>
<td>CRA</td>
<td>26.341</td>
<td>Non-existent</td>
</tr>
<tr>
<td>13. Bacia do Rio de Janeiro</td>
<td>State Decree number 2.186 of 07.06.93</td>
<td>Itacaré and Unçuca</td>
<td>CODETUR</td>
<td>14.925</td>
<td>Existing</td>
</tr>
<tr>
<td>15. Caraiva/Trancoso</td>
<td>State Decree number 2.216 of 14.06.93</td>
<td>Lençóis, Iraquara, Seabra, and Palmeiras</td>
<td>CODETUR</td>
<td>125.400</td>
<td>Existing</td>
</tr>
<tr>
<td>16. Marimbus/Iraquara</td>
<td>State Decree number 2.217 of 14.06.93</td>
<td>Ilhéus</td>
<td>CODETUR</td>
<td>125.400</td>
<td>Existing</td>
</tr>
<tr>
<td>17. Lagoa Encantada</td>
<td>State Decree number 2.218 of 14.06.93</td>
<td>Caravelas and Alcobaça</td>
<td>CODETUR</td>
<td>34.600</td>
<td>Non-existent</td>
</tr>
<tr>
<td>18. Ponta da Baleia/Abrolhos</td>
<td>State Decree number 2.219 of 14.06.93</td>
<td>Camaçari, and Salvador</td>
<td>CODETUR</td>
<td>1.800</td>
<td>In Progress</td>
</tr>
<tr>
<td>19. Rio Capivara</td>
<td>State Decree number 2.220 of 14.06.93</td>
<td>Santa Cruz de Cabrália and Belmont</td>
<td>CODETUR</td>
<td>23.000</td>
<td>Existing</td>
</tr>
</tbody>
</table>
Table 4.10 - Environmentally Protected Areas (APAs) in Bahia (Continuation)

<table>
<thead>
<tr>
<th>Name of the APA</th>
<th>Kind and Date of the Decree of Creation</th>
<th>Municipalities Involved</th>
<th>Administrator until Dec. 1998</th>
<th>Area (thousand hectares)</th>
<th>Management Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>21. Vale das Cascatas</td>
<td>Municipal Law number 077 of 30.01.95</td>
<td>Pau-Brasil</td>
<td>Municipality of Pau-Brasil</td>
<td>5.880</td>
<td>Non-existent</td>
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<tr>
<td>22. Serra das Candeias</td>
<td>Municipal Law number 126 of 19.04.95</td>
<td>Jussari</td>
<td>Municipality of Jussari</td>
<td>3.051</td>
<td>Non-existent</td>
</tr>
<tr>
<td>23. Lagoa Itaparica</td>
<td>State Decree number 6.546 of 18.07.97</td>
<td>Xique-xique and Gentio do Ouro</td>
<td>CRA</td>
<td>78.450</td>
<td>Non-existent</td>
</tr>
<tr>
<td>24. Dunas e Veredas do Baixo Médio São Francisco</td>
<td>State Decree number 6.547 of 18.07.97</td>
<td>Barra, Xique-xique, and Pilão Arcado</td>
<td>CRA</td>
<td>1,085.000</td>
<td>Non-existent</td>
</tr>
<tr>
<td>25. Lago de Pedra do Cavalo</td>
<td>State Decree number 6.548 of 18.07.97</td>
<td>Conceição de Feira, Cachoeira, Antônio Cardoso, Santo Estevão, Governador Mangabeira, Castro Alves, Cruz das Almas, Feira de Santana, Muritiba, São Felix, São Gonçalo dos Campos and Cabaçeteiras do Paraguaçu.</td>
<td>CRA</td>
<td>30.156</td>
<td>Non-existent</td>
</tr>
<tr>
<td>26. Recife das Pauãnas</td>
<td>Municipal Law number 467 of 20.10.97</td>
<td>Vera Cruz</td>
<td>Municipal Secretariat of Tourism and the Environment</td>
<td>To be defined</td>
<td>Non-existent</td>
</tr>
<tr>
<td>27. Pratigi</td>
<td>State Decree number 7.272 of 02.04.98</td>
<td>Ituberá and Nilo Peçanha</td>
<td>CRA and BAHIATURSA*</td>
<td>To be defined</td>
<td>Non-existent</td>
</tr>
</tbody>
</table>

Total Area of APA’s 1,863,541 hectares


*CRA = Centro de Recursos Naturais (Center for Natural Resources). CRA is the environmental agency of the State of Bahia in charge of enacting and enforcing environmental regulations. It is under the Secretariat of Planning, Science and Technology (SEPLANTEC).

CONDER = Companhia de Desenvolvimento da Região Metropolitana (Company for the Development of the Metropolitan Region). It is the state agency in charge of planning for Salvador, the state capital, and surrounding urban areas. It is also under SEPLANTEC jurisdiction.

CODETUR = Coordenação de Desenvolvimento do Turismo (Agency for Coordination of Tourism Development). CODETUR is in charge of tourism planning in the state of Bahia. It is part of the State Secretariat of Culture and Tourism (Sectur).

Bahiatursa = Bahia Tourism Authority. A tourism development company controlled partially by the state government.
CHAPTER 5 - EXPLAINING THE ESTABLISHMENT OF PROTECTED AREAS IN BAHIA: GETTING POLITICAL, INSTITUTIONAL, AND FINANCIAL SUPPORT AT THE STATE LEVEL

This chapter examines the story of the creation of environmentally protected areas (APAs) at the state level in Bahia. Initially, it describes the evolution of environmental management in Bahia and shows how tourism influenced development agencies, especially the State Secretariat of Culture and Tourism (Sectur) and the Company for the Development of the Metropolitan Region (Conder), to become involved in APAs. Later, I argue that the fact that APA policymaking and implementation was decentralized to various state agencies, instead of being concentrated in the state environmental agency (CRA), is the primary reason why large number of APAs were established. I explain how this arrangement overcame the political, institutional, and financial barriers to establishing protected areas described in Chapter 3.

Decentralization aided this process for several reasons. First, because development agencies were involved in APAs, they gained political support at the state level. These agencies, now involved in protected-area policy, had a political interest in creating APAs instead of blocking them. Second, financing for APAs grew because well-funded agencies were creating APAs, and they also attracted alternative sources of funding. Third, competition among several state agencies in administering APAs prompted them to improve their institutional capacity by hiring new people, investing in training, and buying equipment. The three state agencies involved in APAs also tried to improve their institutional capacity to show that they could handle and lead this new environmental task. Finally, local actors were less likely to oppose APAs because they associated APAs with development agencies and projects for their areas, not with land-use restrictions by the state.

5.1) Evolution of Environmental Management in Bahia

Before the 1990s, the number and area of conservation units in Bahia were extremely modest. Only two APAs and few ecological stations and parks existed (CRA, 1998). These conservation units were administrated by various institutions, such as the federal environmental agency (IBAMA), municipalities, and diverse state agencies (agriculture, education, and culture secretariats). Few of those protected areas had even a minimal management structure or plan.36

At that time, the state environmental agency (CRA) had little involvement with protected areas. CRA was created in 1983 mostly to control industrial pollution, especially from the huge Camaçari petrochemical complex,37 which started operating in the late 1970s. CRA thus had limited organizational capacity. Although development in Bahia had expanded into fragile ecosystems, the state had done little to take a more active role in land-use

36 They remain mostly as they were before the 1990s. For example, of the 18 parks in the state, only 4 have any management plan – and two of these are in the hands of IBAMA, the federal environmental agency (CRA, 1998).
37 Camaçari petrochemical complex is a highly industrialized zone located 60 km from Salvador, Bahia's capital. Some 50 heavy industries produce various kinds of petrochemical products.
planning or protecting ecosystems. Environmental problems related to ecosystem
degradation, such as deforestation and illegal fishing, were generally addressed
by the state branch of IBAMA, or very casually by CRA. Moreover, once CRA was put under the
Secretariat of Planning, Science and Technology (SEPLANTEC), it had limited political
autonomy and power and thus was not in a position to politically promote environmental
protection. Therefore, before the 1990s, policies for preserving ecosystems were not a
priority for institutions at the state level, and there was little political momentum for an
expansion of the state’s role in this area.

The growth of tourism, and the elaboration of the state tourism plan in the beginning
of the 1990s, changed this institutional setting. As examined in Appendix 7, tourism had
expanded considerably in Bahia since 1980s, especially in the coastal regions outside
Salvador. State planners saw great potential for nature-based tourism on the unexplored parts
of the Bahian coast. The state therefore decided to invest heavily in tourism infrastructure to
spur further growth in that sector. APAs were the result of discussions among state officials
about how to control the environmental impacts of this planned growth in tourism. Two
important tourism projects were particularly key to understanding the institutional changes
that resulted in the establishment of APAs.

5.2) Two Important Tourism Projects in Bahia

Tourism has grown in Brazil’s Northeast region, and in Bahia, over the past two
decades. Governments expected additional growth and planned to foster it by investing in
infrastructure (see Appendix 7 for an analysis of the tourism sector). In the late 1980s and the
beginning of the 1990s, two large infrastructure development projects – the Green Line road
and the state tourism development program (Prodetur-BA) – were initiated. Both threatened
to harm fragile ecosystems over large areas without appropriate environmental protection
measures. Some NGOs represented on the state environmental council (CEPRAM) started to
question some aspects of those development projects, especially the construction of roads that
would provide access to pristine environments.

The Green Line Road

Because it chose tourism as the new development priority, the state government
decided to execute a much-discussed plan to construct a 142-km road on Bahia’s northern
coast called the Green Line road. This road, built with state resources at a cost of US$ 44.6
million (Diario Oficial, 1993), would cross five municipalities and connect the state capital
(Salvador) to the state’s northern border. The Green Line road was important because it
would allow the metropolitan region of Salvador to grow northward and open an extremely
beautiful coastal region for tourism development. Indeed, the Green Line Road had been a
regional priority requested by local politicians for more than 20 years (Diario Oficial, 1992).

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38 Prodetur is a plan to develop tourism in the Northeast of Brazil by investing over 1.6 billion dollars in tourism
infrastructure in the next 10 years. This plan is coordinated by Banco do Nordeste and state governments with
loans from Inter-American Development Bank – IDB (Ministry of Economy, Treasury and Planning; Bank of
The Northeast (BNB) and InterAmerican Development Bank (IDB), 1992).

39 Information obtained from interviews with CRA officials.
However, this road would cross an underdeveloped coastal zone containing ecologically important resources such as dunes, lagoons, and mangroves. Concern about the road’s impact on these fragile ecosystems rose among some public officials involved in the project, and also among private investors and NGOs. For example, members of the Tamar Project, an NGO that protects marine turtles, worried about the impacts of the road on turtles’ reproduction sites, since half of Brazilian marine turtles hatch on the northern Bahian coast. After scientific studies, as well as debates in CEPRAM and in public forums, the route was moved 8 km inland (Diário Oficial, 1992).

To gain CEPRAM’s approval for the road project, the government also needed to show it would control development after the road construction. As a solution, state officials proposed creation of an environmentally protected area (APA) along the coast and the road called the Northern Coast APA. The idea of creating an APA originated during a meeting among officials from several state agencies to discuss the road project in 1991. The group of government agencies in charge of the project chose the Company for the Development of the Metropolitan Region (Conder) as the organization to coordinate the Northern Coast APA because the metropolitan zone of Salvador had expanded northwards. Conder had some expertise in working with land-use plans, such as in determining zoning codes, that would be useful in elaborating the management plan. Thus the idea of creating an APA as an environmental mitigation procedure for infrastructure projects was pioneered. Conder has since established other APAs and become a promoter of APA policy (more details will follow below, and in Chapter 6).

The State Tourism Development Program

The Bahian state tourism development program defined a series of infrastructure projects designed to attract private investment (Bahia State Government, 1997). The landmark under this program was the establishment of Prodetur-NE, the regional tourism development program for the Brazilian Northeast, created in 1991 (Ministry of Economy, Treasury and Planning, Bank of the Northeast, and InterAmerican Development Bank, 1992). Prodetur-NE consisted of a series of projects with financing from the Bank of the Northeast, based on loans from the InterAmerican Development Bank (IDB) matched by funds from the state government. Under Prodetur, the public sector expected to invest over US$ 1.6 billion in tourism infrastructure and services in the Northeast by the year 2002. The Bank of the Northeast coordinated the program, but state governments were responsible for drawing up their own tourism plans. These plans would identify priority projects, which would be evaluated and approved by the Bank of the Northeast under the supervision of the IDB. Under this program, the Bank of the Northeast approved tourism infrastructure projects in Bahia costing about US$ 337 million (see Table 5.1). By July 1999, projects totaling US$
68.3 million had been completed, while others estimated at US$ 203.5 million were in progress (scheduled for completion from September 1999 to September 2001).

Besides Prodetur-NE, the State of Bahia planned more public investments in areas with tourism potential. These investments would total US$ 2 billion from 1991-2002. State officials also expected to attract more than US$ 4 billion in private investment over the same period (Bahiatursa, 1999). By 1998, completed public investments in tourism in Bahia totaled US$ 723.3 million, with another US$ 832.2 million in progress. In the private sector, completed investments totaled US$ 483.1 million between 1991 and May 1998.

In Bahia, the state plan was coordinated by Bahiatursa, a company under public-private partnership, and implemented by the State Secretariat of Culture and Tourism (Sectur). The plan divided the state into seven “touristic zones” where projects would be concentrated. The tourism envisioned by state planners was based on low-density development for up-market tourists (Bahia State Government, 1997). Environmental preservation was part of this plan, for two main reasons. First, according to the view of governmental authorities, without proper mechanisms for controlling land use and protecting the environment, projects could provoke disordered development and scare off potential investors who wanted to invest in low-density areas. Second, some of these projects needed environmental safeguards to gain approval from IDB and the Bank of the Northeast, as well as to obtain a development permit from the state environmental council (CEPRAM).

Sectur officials planned an environmental strategy based on the idea behind the Northern Coast APA in the Green Line road, which they knew about from debates within the government and from the media. They reasoned that creating APAs in areas with potential for tourism would enable them to control land use, thus appeasing investors. Sectur officials knew that becoming involved in environmental management would pose a challenge, but they were confident that they could pull off the plan. They saw that other agencies built their institutional capacity needed to create and manage APAs from scratch, so why couldn’t they? As a result, Sectur established eight APAs in the “touristic zones” targeted by development projects.

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45 The seven touristic zones are: Coconut Coast (the coast north of Salvador), All Saints Bay (the bay next to Salvador), Dende Coast (the coast around the city of Valença), Cocoa Coast (the coast around the city of Ilheus), Discovery Coast (the coastal region around the city of Porto Seguro), Whales Coast (the coast around the town of Caravelas) and Chapada Diamantina (the region around the national park with same name).

46 According to interviews with public officials in the Secretariat of Tourism and Culture.

47 Information obtained from interviews with officials in the Bank of the Northeast.

48 From interviews with officials in Sectur.

49 Information from interviews with officials in Sectur.

50 These eight APAs are as follows: Santo Antonio, Coroa Vermelha, Caraiva/Trancoso, Serra Grande/Iracaré, Maribus/Iraquara, Serra do Barbado, Ponta da Baleia and Lagoa Encantada APAs (see Table 4.10 for more details).
Table 5.1 – Planned tourism investments in Bahia

<table>
<thead>
<tr>
<th>Kind of Project</th>
<th>Amount (US$1,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ports and Airports</td>
<td>12,640</td>
</tr>
<tr>
<td>Roads</td>
<td>177,308</td>
</tr>
<tr>
<td>Sanitation</td>
<td>56,980</td>
</tr>
<tr>
<td>Energy</td>
<td>15,771</td>
</tr>
<tr>
<td>Restoration of Historical</td>
<td>9,471</td>
</tr>
<tr>
<td>Buildings</td>
<td></td>
</tr>
<tr>
<td>Equipment and Services</td>
<td>46,928</td>
</tr>
<tr>
<td>Studies and Evaluations</td>
<td>10,000</td>
</tr>
<tr>
<td>Marketing</td>
<td>5,000</td>
</tr>
<tr>
<td>Human Resource Development</td>
<td>3,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>337,100</strong></td>
</tr>
</tbody>
</table>

Source: Prodetur-NE: Programa de Ação para o Desenvolvimento do Turismo no Nordeste (SUDENE, BNB, EMBRATUR and CTI/NE, 1992)

5.3) Creating APAs: Getting Political Support at the State Level from Pro-Development Actors

The establishment of APAs requires a considerable amount of political support at both the state and local level. At the state level, political support is necessary on four main fronts (see Figure 4.4 in Chapter 4). These include the governor’s cabinet, the state environmental agency (CRA), the state environmental council (CEPRAM), and the state legislature. CRA and CEPRAM review the technical aspects of an APA proposal and decide whether to recommend it. The state governor issues a decree creating the APA. The state legislature has the power to block this decree, though that has never occurred because members of the governing coalition constitute a majority in the legislature.

Creating conservation units requires enough political clout to prompt the state governor to deliver the decree. Before the 1990s, the state governor had little interest in creating large conservation units. Traditional conservation units required the state to expropriate land, which could provoke both financial and political problems; expropriation consumes large amounts of resources, and the state must confront local politicians and powerful Brazilian agricultural interests. Moreover, elected leaders, state public officials, and civil society did not push the governor in this direction. Besides, the agency that would be naturally in charge of conservation units – CRA – had no technical expertise or political

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51 The analysis of local level political support will be discussed later in this chapter.
52 APAs can also be made through a law approved by the state legislature, but this has not happened yet.
53 I am talking about state conservation unit. In the case of a federal conservation unit, the president needs to issue a federal decree. In the case of municipal conservation unit, the mayor needs to deliver a municipal decree.
forces to spur a broad conservation policy. Development agencies, meanwhile, had no interest in conservation units before the 1990s. In this institutional environment, few conservation units of significant size were created at the state level before 1990, and no state agency had the specialized staff to pursue a comprehensive protected-area policy.

Any important environmental decision in Bahia—whether environmental policies or development projects with potentially negative environmental impacts—must pass through CEPRAM. Because representatives of environmental NGOs constituted one-third of CEPRAM, any project in Bahia with significant environmental consequences very likely needed their political support. These organizations had played an important role in environmental decision making since the 1980s. The other two-thirds of CEPRAM members were divided evenly between representatives of state agencies and both employers’ and employees’ unions (see Table 4.4 for CEPRAM’s composition).

Development actors and environmental forces needed each other to approve their interests in CEPRAM. On the one hand, development agencies and developers’ unions had their seats in CEPRAM, but they did not have the majority of the members. Thus, they had to convince some other members to approve their development projects, including environmental NGOs and the state environmental agency. On the other hand, environmental organizations and agencies had to get the support of many development actors to introduce or change any environmental policy or project. As a result, the environmental agency (CRA), without political support from development actors, would likely fail to introduce wide environmental measures that could restrain development or are too expensive to implement, such as the creation of conservation units. However, development agencies were more likely to succeed in approving wider environmental policies because they would probably get the political support of environmental groups and agencies, and are less likely to be blocked by development actors. Members of CEPRAM were supportive of the establishment of several APAs in the state. The environmentally friendly members saw APAs as ensuring some legal and policy structures to curb environmental degradation in the areas of rapid tourism growth. Development members regarded APAs as a tool for attracting future investors, as well as environmental safeguards of their development projects in order to have them approved by CEPRAM.

The construction of the Green Line road called for the creation of the Northern Coast APA and the elaboration of its management plan by the state urban development agency (Conder). This plan required much effort from Conder. At that time no APA in Bahia had a management plan, and the staff in charge of the task had to start from scratch. Furthermore,

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54 Before 1990, out of non-environmental state agencies, only Conder and the State Secretariat of Agriculture (Seagri) had created conservation units. However, those were in urban areas, such as the Zoo Getulio Vargas and the Abaete lagoon Park and APA, all in Salvador (CRA, 1998).

55 Only two conservation units over 2,000 ha were created before 1990: Gruta dos Brotos APA (11,900 ha) and Ecological Reserve and Park of Itaparica (CRA, 1998), but no steps were made to implement their management.

56 Several important development projects have been stalled in CEPRAM for environmental approval because of the opposition of environmental organizations. Recently, a huge forestry project for pulp and paper industry called Projeto Vera Cruz in the south of the state was stalled for several years in CEPRAM before it get approved. It was approved after many changes in the project and a heated debate in CEPRAM.
Northern Coast APA is one of the largest in the state (142,000 hectares), and it was subject to tremendous development pressure from construction of the Green Line road.

To coordinate the task of elaborating the management plan, Conder formed a group of officials experienced in zoning and creating urban development plans but who had almost no experience in managing ecosystems and environmental planning. This group hired consultants from a local firm to work with Conder staff in-house on the plan. The officials reasoned that they could learn by doing the job, thereby gaining experience that would allow them to elaborate future APA management plans by themselves. Consultants from the United Kingdom later joined this effort through a state contract with the English Overseas Development Agency (ODA). The interaction between Conder staff and these consultants resulted in one of the first APA management plans in Bahia — one that served as a reference for future plans (more details will follow in this chapter and in Chapter 6). For example, Conder built on this experience to elaborate plans for Abaete APA and Tinhare-Boipeba APA.57

The State Secretariat of Culture and Tourism (Sectur) had its own reasons for supporting the creation of APAs, but under its own control. First, if APA administration were assigned to some other agency – CRA, for example – that agency could complicate approval of later development projects within APAs. Having APAs under its own control would allow Sectur to be more flexible in pursuing its development interests. In a few cases this has already happened. For example, in Santo Antonio APA, the initial zoning code was changed to accommodate the interests of tourism investors.58 Municipal officials and developers negotiated the change with state authorities before approving the final zoning code.

Sectur also wanted to control APAs because no other agency had experience in managing them, and it did not want to delay implementation and thus lose financing opportunities. At that time the state environmental agency (CRA) had no institutional capacity to manage protected areas, so it would be unlikely to finish the job in a timely manner. Sectur also presented itself as an environmentally friendly agency when selling Bahia to tourism investors; several Sectur brochures highlight ecotourism and its relation to APAs.59 Sectur’s involvement in environmental management would help it promote itself as an environmentally friendly agency. Finally, environmental projects could attract more state resources for implementing projects such as APAs. Handing these projects to other agencies would mean foregoing opportunities to create in-house jobs.

Other development agencies involved in the state tourism program, including the Secretariat of Industry and Commerce and the Secretariat of Transportation, also lent political support to the new protected areas. Those agencies were responsible for constructing roads and other projects, and hence eager to gain environmental safeguards for them. The Secretariat of Planning was also involved through Conder, which is a subsidiary agency. The

57 This one in cooperation with CRA.
58 Information collected from interviews with local authorities in the municipality of Santa Cruz Cabralia.
59 In a informational brochure to foreign investors, Sectur emphasizes APAs as part of the reasons to invest in nature-based tourism in Bahia (Bahia State Government, 1997).
interest of development agencies prompted state legislators to approve the APAs with little opposition.

CRA acted as an observer in this process, monitoring the activities of the other agencies and working on two relatively small APAs (Mangue Seco and Guaibim APAs). Although CRA was not in charge of creating all the APAs, it took advantage of the environmental momentum in the mid-1990s to submit applications to the governor for approval for areas such as APAs in Bacia do Rio de Janeiro, Lagoa de Itaparica, Dunas e Veredas do Baixo Medio Sao Francisco, and Lago de Pedra do Cavalo (see Table 4.10 for more details). Furthermore, CRA’s role would increase when the APAs’ management plans were elaborated, since CRA is by law the only agency that has the power to impose environmental sanctions. In fact, the state government passed responsibility for administering all APAs to CRA in 1999.

5.4) Funding APAs by Involving Non-Environmental Agencies

The involvement of non-environmental agencies in APA policy helped attract extra funding for the protected areas. State decrees had created two APAs by the early 1990s (Abaete and Gruta dos Brejoes APAs), intended to protect environmentally important regions under development pressure without expropriating private property. However, no attempt had been made to develop management plans or enforce environmental guidelines. Governmental organizations lacked much of the necessary technical expertise, and the environmental agency had no financial resources to hire outside consultants.

Because the Green Line road was a priority of the state government, and the Northern Coast APA was needed to appease investors, lenders, and members of CEPRAM, Conder could raise funds for implementing it. By 1997 Conder had invested more than $US 2.2 million in managing the Northern Coast APA. That amount was less than 20 percent of Conder’s budget for projects but more than 40 percent of CRA’s total 1997 budget.

In 1990 the State Secretariat of Culture and Tourism (Sectur) also undertook a series of studies to define projects included in the state tourism development plan within the Tourism Development Program (Prodetur). The plan included an analysis of the potential environmental impacts of each “touristic zone,” as well as mitigation procedures to satisfy the demands of the lending institutions and CEPRAM. State officials wanted to attract private investors interested in low-density and up-scale coastal resorts, who did not want unplanned development nearby. Municipal governments, however, often did not have the institutional capacity to impose land-use rules, even though the constitution assigns them responsibility for such rules. The solution was the creation of APAs in areas with tourism potential.

As a result of the tourism development plan, Sectur proposed the creation of eight APAs, all approved by decree between 1993 and 1994. Sectur’s accomplishments in

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60 According to the state law number 3858, November 3, 1988 (Oliveira and Ogata, 1998; Governo da Bahia, 1997).
61 Conder budget for projects in 1998 was 11,710,440 (ASPLAN, 1998). This includes only funding for projects, not including personnel, capital or other operational expenses.
elaborating the management plans for these APAs were remarkable (Table 5.3). Since 1995, the agency had generated seven plans – more than the sum of those elaborated by all other agencies by March 1999. Sectur’s APAs contain over 388 thousands hectares – more than 66 percent of the total APA area with management plans. Sectur’s efficiency in developing management plans stemmed from the resources it gathered for environmental management while implementing the state tourism plan. In total, Sectur invested over US$ 14 million in APA management, not counting personnel costs (Table 5.2) – two and a half times CRA’s US$ 5.7 million total budget in 1997.

Sectur could raise funds for these management plans through annual budget requests and through Prodetur, the state tourism plan (Banco do Nordeste, 1996a), whose infrastructure projects were the state’s guarantee to lenders, NGOs in CEPRAM, and potential investors that the state was concerned with environmental management. For example, Sectur prioritized elaboration of the management plan for Santo Antonio APA because the funding organization (IDB) of a nearby road requested a complete plan before releasing the loan.62

To pursue environmental concerns and promote ecotourism, Sectur created an internal environmental department. Some personnel with experience in environmental issues moved to the new department, others were trained, and external consultants were also hired to elaborate the management plans. The new department oversaw the choice of consultants and supervised their work. Its main job was to work with local interests to ensure implementation of the APAs.

The decentralization of APA policy was fundamental in attracting financial resources to APAs. Sectur and Conder attracted funding for APA management plans, because they enabled those two agencies to appease lenders, investors, and members of the state environmental council (CEPRAM). The funds invested in APAs by Sectur and Conder was high compared with what the state had invested in environmental management in the past. It was very unlikely that CRA could have attracted the financial resources raised by the two development agencies.

Table 5.2 - Funds invested in APA management by the various agencies

<table>
<thead>
<tr>
<th>Government agency</th>
<th>Amount invested in APA management (US$ 1,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conder (*)</td>
<td>3,271</td>
</tr>
<tr>
<td>CRA (**)</td>
<td>100</td>
</tr>
<tr>
<td>Sectur (****)</td>
<td>14,080</td>
</tr>
</tbody>
</table>


(****) Total values between 1995 and July 1999, including planned projects. Source: Project list, State Secretariat of Culture and Tourism (Sectur, 1999).

62 Information obtained from a Sectur official. Santo Antonio APA was created after Ponta da Baleia APA, but the management plan of the former was made before than the later.
Table 5.3 - Management plans for the APAs in Bahia

<table>
<thead>
<tr>
<th>Initial Administrator</th>
<th>APAs with management plan</th>
<th>APAs without management plan *</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Area (% of total)</td>
</tr>
<tr>
<td>Conder</td>
<td>3</td>
<td>187,000 ha (32.2%)</td>
</tr>
<tr>
<td>CRA</td>
<td>2</td>
<td>5,395 ha (0.9%)</td>
</tr>
<tr>
<td>Sectur</td>
<td>7</td>
<td>388,377 ha (66.9%)</td>
</tr>
<tr>
<td>Municipalities</td>
<td>0</td>
<td>0,0</td>
</tr>
<tr>
<td>Total</td>
<td>12</td>
<td>580,872 ha</td>
</tr>
</tbody>
</table>

Source: CRA, 1999

(*) Includes management plans whose elaboration is in progress. The areas of Pratigi APA and Recife das Piaunas APA were not included in the calculation because they were undefined.

5.5) Competition among Governmental Agencies Can Improve Institutional Capacity

The proposal to decentralize responsibility for creating and administering APAs provoked competition among different state agencies. Although the state environmental agency had a mandate to deal with environmental matters, it was not the only agency interested in APAs, as APAs do allow some kinds of development. APAs can be viewed as the “environmental part” of a development project, in the way that the Northern Coast APA was the environmental mitigation measure legitimizing construction of the Green Line road. Thus other agencies had good reason to jump into the APA business as part of a tourism-related environmental strategy or urban development plans.

Involvement with APA administration gives government agencies considerable leverage for requesting resources. Agencies can request state funds to implement APAs (see Table 5.2), or attract funding from national and international organizations, as in the agreement between Conder and the English ODA for the Northern Coast APA. Agencies inexperienced in environmental matters found they could extend their project “portfolios” if they developed the institutional capacity to perform the job, thereby gaining power and political influence. For instance, Conder had acquired considerable environmental expertise since its commitment to the Northern Coast APA. It even assisted the state environmental agency (CRA) in elaborating the management plan for Tinhare-Boipeba APA.

Finally, by expanding into the environmental arena, development agencies could satisfy most of the environmental requirements for their own projects, limiting interference by the environmental agency in their jobs. Sectur had significantly engaged in environmental management since beginning to implement the state tourism development plan, needing CRA only to approve its plans.
To implement the new task of administrating APAs, agencies invested in training, equipment, new personnel, and outside consulting. Conder and Sectur trained their officials in environmental planning and management techniques internally and through external courses, including those abroad. For example, the coordinator of the Northern Coast APA traveled to England for a course in environmental management through the English ODA involved in that APA. Sectur employees were trained in environmental planning and management by consultants working on Sectur’s APA management plans.

Agencies invested in equipment for doing the APA job, including office equipment for performing technical studies and facilities and vehicles for doing fieldwork and maintaining and enforcing APAs. Conder and Sectur had acquired computers for imaging APA areas. Conder had invested in equipment for managing solid waste in the Northern Coast APA (Conder, 1999). CRA, with its limited resources, had worked with Conder and the Brazilian state oil company (Petrobras) to acquire equipment for collecting waste in the communities and on the beaches of Mangue Seco APA.

Agencies had hired or allocated many employees to do APA work. Different strategies were used to increase the number of employees working on APAs: hiring new employees, transferring some from other sectors to APA work, introducing employees from overseas development agencies, or even requesting employees from other government bureaucracies.

Conder grouped employees from different sectors to work on APA. For example, the head of the Northern APA project transferred from a government agency newly merged with Conder. Conder also relied on officials from the English ODA who worked on the Northern APA project for more than three years. Sectur also combined officials from different sections with experience in physical and environmental planning, some from a quasi-state tourism bureaucracy, Bahiaturia.

CRA had assigned a small group to work part-time on APAs since the beginning of the 1990s, but did not produce one plan until pressured by other agencies to do so. CRA employees were upset to learn that other agencies would create and administer APAs – they wanted to show that they could do so. CRA allocated several employees to work on APAs, some part-time and some full-time, and hired 43 new employees in 1999, many of whom will be involved with APAs.

All three agencies relied on outside consultants to overcome the technical and institutional barriers to implementing APAs. Some of the consulting activities generated a great deal of learning within each agency. In elaborating the management plan for the Northern Coast APA, Conder staff learned several tasks from outside consultants working in-house, such as how to read aerial photographs and identify ecosystem limits. As a result,

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63 Information obtained from the interviews with officials in Sectur and Conder.
64 This actually was a result of an attempt of Petrobras to clean its image after an oil spill offshore, for which Petrobras was heavily fined.
65 Because firing public employees is difficult, moving employees that are idle in one agency to another is very common in the Brazilian bureaucracy.
developing APA management plans required less consulting. In elaborating the latest management plan in Tinhare-Boipeba APA, Conder hired almost no outside consultants.

In interviews and field visits, I found that officials in all three agencies wanted to show that they were doing a good job with their APAs, and that they could do as well or better than the other organizations. In developing the management plans for Northern Coast APA and Mangue Seco APA, both Conder and CRA claimed they were pioneers in creating effective management plans on schedule. On several occasions, officials mentioned activities they had or would pursue with their APAs that other agencies were not pursuing.

CRA officials highlighted their significant efforts to elaborate their first APA management plan (Mangue Seco APA), and their ability to do a good job despite having fewer resources for hiring outside consultants than “rich” agencies. Although CRA struggled to finish the management plan for Mangue Seco APA because it lacked resources, the effort showed state authorities and other agencies that it could do the job. The recent transfer of all APAs to CRA administration in 1999 was viewed as a great victory, and with certain frustration by officials in other organizations, who had expected to administer their APAs. This transfer allowed CRA to justify an increase of 43 employees.

All the agencies made significant efforts to improve their institutional capacity to deal with APAs. Competition among the three prompted them to improve their institutional capacity, thus increasing the overall ability of state institutions to create and administer protected areas.

5.6) Getting Local Support: APAs as Potential Investment Magnets

The association of APAs with state development agencies and the prospect of attracting state and private investment eased the resistance of local governments to interference in environmental and land-use matters. Development agencies also spurred the improvement of local environmental institutions and raised environmental consciousness among local development actors (such as landowners) while publicizing APAs and the importance of environmental protection for tourism development.

The creation of an APA by the state interferes with local jurisdiction over land use. Although most municipalities in Bahia did not have the institutional capacity to create or implement a land-use management plan, the state had never before intervened substantially in land-use matters. Control over land ownership and use are some of the most powerful tools local politicians have at their disposal, as infrastructure projects gain them popularity and political support.

Although APAs allow the state to define land-use rules, many local governments regarded them as an opportunity to attract public or private investment, especially for tourism development, rather than as interference in municipal matters. This view results from the association of some APAs with the State Secretariat of Culture and Tourism (Sectur), and with Conder, which provided urban infrastructure. The fact that many APAs were created in

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66 Out of the 415 municipalities in Bahia only Salvador, the capital, has a municipal master plan.
areas with state infrastructure investments, such as the Green Line in Northern Coast APA and the Ilhéus-Itacaré road in the Itacaré APA, also suggested that protected areas would attract more investment.

Because of the association between environmental protection and tourism, some municipalities that were not selected for public investment in tourism infrastructure even tried to create their own APAs to attract such investments. As a local politician who was trying to approve a municipal APA said, “We want investments here, so we are trying to create this APA to show state authorities the tourism potential of our municipality.” Municipalities had created five APAs on their own, but none prepared a management plan until 1999 (see Table 5.3).

To encourage municipal support for APAs, state agencies organized public hearings to gather information for APA management plans and explain aspects of APAs concerning land use and environmental protection. Many of the municipalities where APAs located had limited economic activity, and the arrival of state government officials, who rarely visit such places, was an important event, especially when they discussed new opportunities for economic development such as tourism. Local authorities were very cooperative with state officials in most of these cases. Local meetings organized by Sectur had sometimes attracted hundreds of local politicians and officials, community leaders, NGO members, landowners, and other citizens.

Efforts to establish APAs and link environmental preservation with tourism development prompted many municipalities to create or upgrade their institutional structure for environmental protection. Local governments created municipal environmental agencies, passed environmental legislation, and introduced environmental programs (see Chapter 6 for more details). Such efforts not only indicate to state and federal agencies that the local government was prepared to receive investments in tourism and could manage some decentralized environmental responsibilities. They also allowed municipalities to apply for funds for environmental protection from state, federal, nongovernmental, and international sources.

For example, Porto Seguro municipality, which received one of the largest slices of public investment in tourism in the last decade (Bahia State Government, 1997), used the funds to create an environmental agency and to plan several environmental programs (Tosato, Maia & Braga, 1997). The head of the new agency and many of its employees were formerly members of local environmental NGOs, which had tried to put environmental causes on the municipal agenda. The priorities of the agency included expanding the area of Trancoso APA

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67 Mayor of a town said during a visit to CRA.
68 Information obtained from officials in Sectur – the State Secretariat of Culture and Tourism.
69 For example, one meeting in Itacare about Itacare APA more than 200 people were present, according to one local government official.
70 There are several sources of environmental funding for municipal governments, such as National Fund for the Environment (Fundo Nacional do Meio Ambiente, or FNMA) from the Federal Ministry of the Environment, Water Resources and the Amazon (MMA), and the Program for Decentralized Implementation (Programa de Execução Decentralizada, or PED) from the state and federal government.
and taking over its administration. The agency had already created a municipal park in a coral reef just off the coast, which is a popular tourist attraction. Visitation was limited to a certain number of boats per day, and tourists had to pay a fee to board the boats. During public hearings to discuss the state’s regional tourism plan, officials from the new environmental agency supported the efforts of local NGOs to modify certain projects, and the changes were implemented.\(^{71}\)

Local landowners tended to be antagonistic to land-use rules that limit development, such as APA guidelines. However, some landowners seemed to have changed their attitude since the creation of APAs and promotion of ecotourism by state agencies, especially Sectur. The idea that the undeveloped land could be an asset, and that tourism could be promoted with only modest investment, converted landowners to the environmental cause.\(^{72}\) For example, landowners supported the creation of Itacare APA, hoping that infrastructure investments would attract tourists, and 33 of them proposed several environmental projects (Newspaper article, n.d.). Many of these landowners had produced cacao for generations using an ecologically friendly method (Conservation International, 1995).\(^{73}\) Although this approach preserved most of the region’s forests, a crop disease devastated the regional economy in the 1980s, and ecotourism appeared to be an important economic alternative.

APA management plans served as guidelines for municipal land-use legislation. Because municipalities had limited financial, technical, and institutional resources for planning, very few had any comprehensive land-use plans. APA management plans included land-use guidelines that municipalities could easily adopt, and many municipalities ratified these regulations by law or decree. Two municipalities with land in Itacare APA, for example – Itacare and Uruçuca – approved APA regulations as local laws. Other municipalities such as Cairu in Tinhare APA provided staff for enforcing APA guidelines, even though they did not adopt them as municipal regulations.

State agencies trained local officials in tourism and environmental management techniques during the ten years since elaboration of the state tourism plan. State officials or consultants paid by the state offered courses in almost all municipalities within APAs on the significance of protected areas and management techniques to enforce environmental guidelines. Course participants were able to examine a particular development project to see if it adheres to zoning guidelines, and also learn about local fauna and flora. These courses helped municipalities understand the importance of environmental planning and management for long-term development and raised local environmental consciousness.

The involvement of development agencies in APAs seemed to have built local support for environmental protection. Development agencies publicized APAs, trained local officials and citizens, and spread the idea of ecotourism. Before the 1990s, environmental matters

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\(^{71}\) For example, the planned road between Porto Seguro and Caraiva had its route changed because of concerns about deforestation and historical preservation. In another project, the building of a water supply system, a forestry component was added to protect the reservoir.

\(^{72}\) Information obtained from the interviews with landowners in Itacare APA.

\(^{73}\) Tree shadow is essential for growing cacao plant. This method consists of planting cacao in the middle of the natural forest.
were addressed mostly by the environmental agency, which usually used police power and rarely attracted state resources to municipalities. The participation of development agencies changed local conceptions of environmental conservation. Local people began to associate APAs with state resources and opportunities for economic development, thus easing local resistance to state interference in local land-use matters.

5.7) Horizontal Decentralization with Checks and Balances

The involvement of development-oriented agencies in environmental policy implementation can certainly generate institutional, financial, and political support for environmental policies, as this research shows. However, such involvement could potentially also generate institutional problems, as described in Chapter 3. In the case of Bahia, most of these problems did not arise.

One such problem is that development-oriented agencies generally have specific priorities, such as agriculture or tourism development, and environmental objectives may conflict with them. Development-oriented agencies could simply neglect environmental concerns in achieving their other objectives. Although this could occur in certain cases, in Bahia development agencies needed to establish and implement protected areas as environmental safeguards to gain approval for their development projects from state and external actors. For example, the State Secretariat of Culture and Tourism (Sectur) established many APAs as environmental safeguards for its infrastructure projects financed by international donors. Such protected areas include Santo Antonio APA, the environmental safeguard for a road financed by the IDB. APAs were also important elements in these agencies' strategies to attract private investments in low-density nature-based tourism. APAs were a guarantee to investors that the state would control chaotic development and land subdivision. Sectur highlighted this point in several brochures for investors (Bahia State Government, 1997). Thus, the establishment of APAs was compatible with the primary objectives of development agencies.

A second challenge is that development projects that depend on environmental safeguards controlled by the same agency may generate internal conflict—a case of the foxes guarding the chicken coup. Agencies may prioritize development objectives and disregard proper environmental standards. However, this could be avoided by allowing an outside institution to oversee environmental guidelines and ensure their compatibility with development projects.

In Bahia, besides the external actors (donors, the Bank of the Northeast, and the federal government), the state environmental agency (CRA) and environmental council (CEPRAM) acted as independent overseers. Although other agencies also administered APAs, CRA had jurisdiction over environmental offenses, according to the Bahian constitution. Also, all APAs and development projects with significant environmental impacts needed the approval of CRA and CEPRAM. With environmental NGOs as one third of its members, CEPRAM could possibly question and bar any action considered deleterious to the environment.
Moreover, the new task of environmental protection introduced into development agencies unprecedented environmental values and procedures, changing the way the agencies think about and perform their development job. Forming a group of staff members to work on environmental issues created a constituency for environmental protection in internal debates. This contrasted with the usual mode in which development agencies argue against external officials in charge of environmental protection. The staff working on environmental issues within the development agencies showed great commitment to environmental values. A number even risked their jobs and careers to defend proposed environmental guidelines in internal debates. These employees conveyed their knowledge to other staff members, or applied it to other projects implemented by the agency. For example, some members of Conder’s staff working on the Northern Coast APA contributed their experience in environmental planning to urban development projects.

Third, assigning responsibility for protected areas to several agencies could dissipate scarce institutional and financial resources for implementing them. The same resources concentrated in one agency might generate stronger institutional capacity. This may be true when resources come from a dedicated source, such as a new state fund for an environmental program. But in the case of Bahia, financial and institutional resources for environmental protection were not determined a priori, such as in the annual state budget. Public agencies could draw on diverse sources of funding and staff for implementing their policies, thus expanding the total financial and institutional resources devoted to APAs. Indeed, CRA alone would not have been able to establish many APAs because the agency was unlikely to secure the needed substantial increases in budget and staff. Conder and Sectur, in contrast, acquired funds for APAs from their own budgets. These resources substantially expanded the funding the state dedicated to environmental protection.

Fourth, competition among public agencies could generate feuds over public activities and resources. Environmental projects tend to attract funding from international donors and governments, and can bring political leverage in requesting and receiving resources. Competing agencies could try to sabotage other agencies’ environmental projects or block them politically.

In Bahia, competition for controlling APAs was intense among the three public agencies, but sabotage and political blockage did not occur. CRA’s top bureaucrats supported the idea of decentralizing APA administration from the beginning, as they realized they would not have the political and financial resources to negotiate with developers and establish a large number of APAs.

At first, medium-level bureaucrats in different agencies did show a certain level of mistrust regarding the technical aspects of APAs. However, this mistrust dissipated over time as there was enough work for all the agencies, and they began to cooperate in establishing new APAs. For example, CRA and Conder worked together to develop the management plan.

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74 This is based on my interviews with staff in Conder and Sectur.
75 Such as the environmental zoning learnt by Conder staff in the Northern Coast APA, now being used in their other projects (e.g. urbanization and master plans).
76 Information obtained from former and actual high level CRA’s bureaucrats.
for Tinhare-Boipeba APA. The experience Conder acquired in developing the management plan for the huge Northern Coast APA was essential in helping CRA officials create the plan for Boipeba APA. In addition, competition among agencies ended up expanding the overall institutional capacity and financial resources of APAs because agencies wanted to create and manage APAs well to gain political leverage in requesting more state funding.

Fifth, dispersion of responsibility for the same task among several agencies might cause confusion about who should do what and when, and also undermine accountability. One agency might expect another agency to do a job assigned to both of them; in the end, no agency would perform the task or assume responsibility for non-performance or failure. Institutional conflicts could result once agencies started to blame each other.

The cases in this study provide some evidence of such institutional conflicts. Conflicts over institutional responsibility for APAs have occurred mostly among state agencies, between the executive and judiciary branch, and between state and municipal governments (Oliveira & Ogata, 1998). The Abaete APA illustrates these three kinds of conflicts. In a contested development project, the municipal government issued a permit without consulting either CRA or Conder, which must approve any project located in an APA. Those state agencies, in turn, did not work together to enforce APA guidelines and stop the project. In the end, a public prosecutor (similar to a US district attorney) sued both state agencies, the municipal government, and the developer.

However, although such conflicts did occur in creating APAs and their guidelines, these disputes are not unique to APAs or protected-area policy. In the environmental arena in Brazil, rules and responsibilities are in transition, and conflicts among diverse public institutions are common in Bahia and other states. In Rio de Janeiro, for example, state and municipal governments recently blamed each other for water pollution on the beach of Ipanema. State authorities pointed out that the pollution was caused by a leak from the sewer system, which was managed by the municipal government. Municipal officials, in turn, blamed officials of the state-managed water treatment facility for lacking the capacity to process large volumes of sewage during heavy rains. There was no agreement about who was responsible for the problem (Jornal do Brazil, 2000).

In sum, the story at the state level examined in this chapter shows how decentralization of APA policy implementation among state environmental and development agencies enhanced the political clout and financial and institutional resources accruing to APAs in Bahia. Had APAs been concentrated in the hands of the environmental agency, it might not have obtained those resources and overcome the political obstacles.

This chapter also shows that development projects related to tourism were important in focusing development agencies on environmental management. In the next chapter, I analyze the story of the establishment of APAs at the local level. I look at seven case studies to determine how decentralization affected these cases, and which other factors were important in implementing and enforcing APA guidelines at the local level.
CHAPTER 6 - INVOLVING KEY LOCAL ACTORS IN ENFORCEMENT

This chapter examines the APA story at the local level. It looks at how APAs were actually implemented in seven case studies, based on empirical research. I use the analytical framework developed in Chapter 3 to analyze the stories at the local level. In this framework, I identified lack of political, financial, and institutional support as barriers to the proper establishment of protected areas. In the stories at the local level, I assess the level of local support for enforcement of APA guidelines. I develop a series of indicators to evaluate to what extent local governments and non-governmental groups provided political, financial, and institutional support for enforcement in the seven APA case studies.

In the end, I identified three factors that help explain why some APAs received more local support than others: the primary objective of a particular APA, the number of municipalities involved in it, and the timing of the involvement of local actors. I argue that the APAs created to control environmental impacts of infrastructure projects tended to receive less local support for enforcement than the group of APAs created to control tourism development already under way, though overseers of the former group managed to develop and approve their management plans more quickly. Also, I indicate that APAs created in one municipality are more manageable for the state in terms of building local institutional capacity for enforcement. Finally, I contend that early involvement of local actors in the process of establishing APAs often results in more local support for the enforcement of APA guidelines (Figure 6.1).

This chapter is divided into several sections. First, I analyze what policymakers and officials in state agencies expected to occur regarding APAs. State agencies planned to build local political support and institutional capacity in order to pass some enforcement responsibilities to local actors, but this did not happen as state agencies anticipated. Second, I examine the main political, institutional, and financial obstacles to participation in enforcing APA guidelines, and shows how I assessed the enforcement structure involving both
government and non-governmental actors at the local level. Fourth, I lay out the analysis of the seven case studies: Guaibim, Mangue Seco, Northern Coast, Tinhare-Boipeba, Itacare, Santo Antonio, and Abaete APAs. Finally, I explain how and why the efforts to overcome the obstacles to local support for enforcement had different outcomes in the seven case studies.

6.1) The State’s Initial Expectations: Building Local Institutional Capacity

Once a state APA is created by legislation, its administrator – the state agency specified in the decree – has to devise a management plan. This plan should be developed with the participation of municipal governments and other local interests. State and local level institutions are in charge of enforcing APA guidelines in the management plan.

According to the enforcement structure initially framed by state authorities, the state, through one of its agencies, was responsible for enforcing APA guidelines and for training local governments in enforcing APA guidelines. The state planned to later pass enforcement on responsibilities to municipalities, retaining only a supervisory role. In the long term, municipal governments and civil society would jointly form environmental councils to take over part of the planning and enforcement responsibility. Moreover, municipal governments were supposed to approve APA legislation so they can apply legal sanctions. Thus, municipal authorities with the help of local inhabitants would participate in the supervision and enforcement of APA guidelines. The state would get involved only in more complicated situations.

State agencies had ambitious plans to build local institutional capacity for the enforcement of APA guidelines. They expected to do so by fully engaging local governments and non-government actors (communities, NGOs, landowners, business people, tourists, and developers) in that process. Capacity building would be achieved through local involvement in defining APA limits and management plan, courses, public hearings, publicizing material and encouragement in performing enforcement tasks (denouncing and inspections, and legal sanctions, in the case of local governments).

State agencies expected that potential revenues from tourism and state-funded improvements in local infrastructure would stimulate local governments to give political, institutional, and financial support to APAs. In the state’s view, municipal governments would approve local APA laws to back up state legislation, create municipal environmental agencies to enforce those laws by hiring new personnel or transferring existing staff to these agencies, and acquiring equipment. State planners also counted on local civil society (community groups, NGOs, businesses, etc.) to create or improve non-governmental institutions engaging in environmental activities, thereby strengthening APA enforcement through environmental education, activism, inspections, denouncement, and small projects.

However, outcomes ended up differently from the plans on paper. Although the creation of APAs stimulated some improvement of local environmental institutions, the capacity of local actors to enforce APAs varied substantially among the different APAs and over time. In some APAs, municipal governments and local inhabitants became involved in establishing APAs beginning with early discussions. In others, locals maintained very little
involvement throughout the process. Some municipal governments improved their institutional capacity to enforce APAs by lending political and institutional support. Others developed almost no institutional capacity throughout the process of establishing the APAs.

Different municipalities saw varying improvements in the number, quality, and level of engagement of their civil society groups in APA enforcement. Finally, the interaction on implementing APA policies differed between state agencies and local actors, as well as among state agencies themselves. Agencies and locals interacted smoothly in some cases and roughly in others.

6.2) Political, Institutional, and Financial Support: Assessing Local Actors’ Participation in Enforcement

Local participation in enforcing APA guidelines depended upon support for local actors. State government agencies would try to build institutional capacity and alliances with municipal governments and non-governmental groups to strengthen local enforcement capacities.

For the analyses in this chapter, I draw on an analytical framework based on the analyses of the main obstacles to establishing protected areas in Chapter 3, and similar analyses of how to overcome these obstacles at the state level in Bahia in Chapter 5. To convince local institutions to participate in enforcing APA guidelines, state agencies had to first encourage local political support and develop the institutional and financial capacity of both municipal governments and non-governmental actors.

Political support at the local level would come in the form of new organizations working on APAs, local environmental legislation, and changes in attitudes toward APAs and environmental matters. Efforts to support APAs would not require municipal governments or local non-governmental groups to commit sparse funds. Municipal governments would simply have to change their public discourse, bargain with the city council to gain approval of APA legislation, and create an environmental agency or assign new environmental responsibilities to an existing agency (many municipalities assigned environmental matters to the tourism or agriculture agency). In the non-governmental sector, generating political support would mean creating new environmental NGOs that would exert political pressure on local politicians and participate in environmental decision making. To ensure these changes, state agencies would have to ask for political support from local allies or build new alliances, and stir environmental consciousness through training or public campaigns over environmental issues.

Institutional and financial support would go one step beyond mere political support. Such support would mean that local government and non-governmental institutions would provide staff, equipment, and facilities for enforcement, and initiate activities such as inspections and public environmental education. These activities would involve allocating financial or institutional resources to environmental protection. To generate these financial resources, local governments would have to assign more funds from the municipal budget to
environmental protection, ask for more funding from state government, or establish an agreement for provision of environmental services with a state or federal agency. Municipalities would also have to transfer people and equipment from other functions to environmental protection, or hire new part-time or full-time employees. Training or purchase of new equipment would come from the municipal budget or would be provided by the state or federal agencies.

Non-governmental organizations would have to raise funds for participating in environmental projects through their own sources, new private or international sources, or government programs that provide funds for NGOs (such as FNMA – National Funds for the Environment). NGOs could also provide services through government contracts. For example, some NGOs provided government-sponsored environmental education in APAs. (An NGO called Iesb offered environmental education courses in the Una reserve and Itacare APA sponsored partially by the state.)

NGOs would use new funds to draw in institutional capacity would come from new volunteers, employees, training, or equipment acquired with an increase in the NGO’s budget or allocated from other activities. Training could be received through some training programs offered by state agencies to local institutions.

Thus, improvements in the financial and institutional capacity of local governments and non-governmental groups would require transferring their own existing resources or tapping new ones. Building this capacity would require local groups to apply for already existent sources of funding and institutional resources (e.g., training) provided by higher level of governments, private, or international sources.

This research examines to what extent local governments and non-governmental groups provided political, institutional, and financial support for enforcing APA guidelines. The role of municipal governments and local non-governmental actors in the enforcement of APAs plan to be qualitatively assessed for each of the seven APAs. I specified three levels of participation in enforcement based on indicators of political, financial, and institutional support by local actors: low, medium, and high. These indicators were specified for both

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77 Municipal budgets are composed by large part from transfers of funds from upper level governments, state and federal (Souza, 1996). Many of these transfers are earmarked for programs in, for example, education and health. Other transfers are not and can be used with relatively flexibility. Funds for environmental programs, such as APA enforcement, would come from the allocation of any surplus from the latter transfers or from the shift of resources for other purposes.

78 Municipal governments can sign agreements with government agencies for the provision of environmental services in exchange for funds, equipment or institutional aid (e.g., training). These agreements could be for specific tasks or equipment, such as the purchase of vehicles or performing environmental inspections. Also, agreements could be sought for specific programs offered by state or federal governments. For example, the federal government created the National Fund for the Environment (FNMA, Fundo Nacional do Meio Ambiente) in 1989. Most of this fund was planned to be spent in environmental projects managed by NGOs or municipal governments in municipalities with less than 120,000 inhabitants. Another example is the Projects for Decentralized Execution (PED, Programas de Execução Decentralizada), a federal-state program for providing funds and institutional assistance for the execution of specific environmental projects by selected municipal government (Ogata, Abreu & Lacerda Neta, 1995).
governments and non-governmental actors in the region covered by a certain APA (see Tables 6.1 and 6.2).

A municipal government was seen as having a low level of enforcement participation when it evinced no interest in the APA or maintained a confrontational attitude towards environmental protection (Table 6.1). Medium-level enforcement meant that local governments provided some political support to APAs, for example, by maintaining a non-confrontational attitude toward APA environmental guidelines, by approving municipal legislation, and by creating an institution for dealing with APA and other environmental issues. However, at this level governments provided little or no institutional capacity for actual APA enforcement. High-level involvement implied some municipal institutional capacity and a proactive role in enforcing APA guidelines, such as carrying out inspections, screening projects for licensing, hiring personnel to work on APAs, and pursuing environmental projects (such as environmental education and garbage collection).

Support for enforcement by non-governmental actors was assessed in a similar manner (Table 6.2). If no non-governmental groups were involved in APA affairs, the area had a low level of enforcement support. Medium-level support implied the existence of one or more non-governmental groups involved in APAs and their participation in decisions concerning APA at the local or state level. Finally, high-level support entailed pro-active participation in APA enforcement, such as denouncing environmental offenses regularly and creating environmental projects (such as environmental education programs). Table 6.4 summarizes the results of the assessment for all seven case studies.

Table 6.1 – Level of municipal government support in APA enforcement

<table>
<thead>
<tr>
<th>Level</th>
<th>Position towards APAs</th>
<th>Qualitative proxy measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>Confrontational attitude or no interest</td>
<td>- no structure for enforcing APA guidelines</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- existence of conflicts with state agencies over APA</td>
</tr>
<tr>
<td>Medium</td>
<td>Political support but not much institutional capacity</td>
<td>- change in the discourse about environmental protection</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- existence of environmental regulation to back APA guidelines</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- creation of a municipal agency to work with environmental protection</td>
</tr>
<tr>
<td>High</td>
<td>Political support and some institutional-financial support</td>
<td>- change in the discourse about environmental protection</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- existence of environmental regulation to back APA guidelines</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- financial resources invested in APA enforcement</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- staff hired for APA guideline enforcement</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- regular inspections on APA area</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- screening structure for licensing projects that take into account APAs</td>
</tr>
</tbody>
</table>
Table 6.2 – Level of enforcement support from local non-governmental groups in APA

<table>
<thead>
<tr>
<th>Level</th>
<th>Position towards APAs</th>
<th>Qualitative proxy measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>No interest or confrontational attitude</td>
<td>- no local groups or locals involved in APA</td>
</tr>
<tr>
<td>Medium</td>
<td>Some interest, but no institutional capacity</td>
<td>- existence of local environmental groups involved in APA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- locals participating in environmental policy decisions (municipal environmental councils)</td>
</tr>
<tr>
<td>High</td>
<td>Much interest, some institutional capacity</td>
<td>- existence of local environmental groups</td>
</tr>
<tr>
<td></td>
<td>and existence of activities</td>
<td>- locals participating in environmental policy decisions (municipal environmental councils)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- locals involved in environmental initiatives (environmental education, denouncing, garbage collection, etc.)</td>
</tr>
</tbody>
</table>

6.3) Case Studies

To understand the functioning of APAs at the local level, seven APAs were studied. All these APAs had management plans approved by the state environmental council (CEPRAM). There were two criteria for choosing these 7 APAs of the existing 29. First, in order to study the implementation process over time, I decided that the creation decrees of selected APAs had to be at least four years old when I started my field research in September 1998. Second, these decrees had to have been implemented at least in part. These 7 APAs were the only APAs in coastal areas that had management plans approved by CEPRAM before September 1998. The set of 7 APAs represents a rich illustration of the environment under which APAs had been implemented (Table 6.3), as they were administered by various state agencies (CRA, Conder, and Sectur) and were in different geographical regions. In the following sections, these seven case studies are analyzed in detail.
Table 6.3: Characteristics of the seven APAs studied*

<table>
<thead>
<tr>
<th>APA Name</th>
<th>First Administrator</th>
<th>Date of the creation</th>
<th>Date of management plan approval by the State Council (c)</th>
<th>Time in months between creation and approval (c-d)</th>
<th>Number of Municipalities in the APA</th>
<th>Geographical Region</th>
<th>Area in hectares</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guaibim</td>
<td>CRA</td>
<td>05/11/92</td>
<td>05/18/93</td>
<td>12.2</td>
<td>1</td>
<td>South</td>
<td>2,000</td>
</tr>
<tr>
<td>Mangue Seco</td>
<td>CRA</td>
<td>11/06/91</td>
<td>09/23/94</td>
<td>34.6</td>
<td>1</td>
<td>North</td>
<td>3,395</td>
</tr>
<tr>
<td>Northern Coast</td>
<td>Conder</td>
<td>03/17/92</td>
<td>02/21/95</td>
<td>23.5</td>
<td>5</td>
<td>North</td>
<td>142,000</td>
</tr>
<tr>
<td>Tinhare</td>
<td>CRA/Conder</td>
<td>06/05/92</td>
<td>06/19/98</td>
<td>72.5</td>
<td>1</td>
<td>South</td>
<td>43,300</td>
</tr>
<tr>
<td>Itacare</td>
<td>Sectur</td>
<td>06/07/93</td>
<td>12/19/96</td>
<td>42.4</td>
<td>2</td>
<td>South</td>
<td>14,925</td>
</tr>
<tr>
<td>Santo Antonio</td>
<td>Sectur</td>
<td>08/31/94</td>
<td>11/25/96</td>
<td>21.2</td>
<td>2</td>
<td>South</td>
<td>23,000</td>
</tr>
<tr>
<td>Abaete</td>
<td>Conder</td>
<td>09/22/87</td>
<td>05/22/98</td>
<td>128.0</td>
<td>1</td>
<td>Salvador</td>
<td>1,800</td>
</tr>
</tbody>
</table>


6.3.1) Guaibim APA

History

Guaibim was the first APA created to mitigate and control environmental impacts of development projects. Before Guaibim, all proposed APAs intended to preserve important ecosystems without having to expropriate land, but not to mitigate the environmental impacts of specific projects. The idea of Guaibim APA became a reference point for many APAs later, such as the Northern Coast APA and the eight APAs created by the State Secretariat of Culture and Tourism (Sectur). In all these cases, the state created APAs as mechanisms for land-use control and environmental preservation in areas where one or several infrastructure projects would be likely to spur development, especially tourism projects.

The Guaibim APA was created in the face of a proposed tourism resort in 1990. Entrepreneurs had intended to build a 300-hectare development project in an underdeveloped coastal area in the municipality of Valença. The project was located in a zone near fragile ecosystems protected by national and state law, in violation of local zoning rules. Developers needed to submit an environmental impact assessment for approval by the state environmental council (CEPRAM). According to specialists of the state environmental agency (CRA), which was in charge of evaluating the environmental viability of the project, the plan was very unlikely to be approved. CRA negotiated with the developers to change the project to comply with environmental legislation. During this negotiation, which involved state and municipal...
officials, environmentalists, and local landowners, developers agreed to build in a different spot and to preserve a large part of their property, including the most important conserved ecosystems.

To make the decisions enforceable, state officials suggested the creation of an APA in the region. This APA would include other properties and protect the rest of the region, which contained well-preserved coastal ecosystems. This idea appealed to both environmentalists and developers.\textsuperscript{81} Environmentalists liked the idea of an APA that would protect an environmentally important area much larger than the proposed development area, and they doubted that they would find any other means to influence the proposed development project. Developers, in turn, needed their plans approved by CEPRAM, which has NGO representatives as one-third of its members. For their part, landowners were eager to see the value of their land appreciate with the new development, but feared that a large project would spark unplanned development and depress the value of their properties. Thus, state and municipal governments decided to create the Guaibim APA in May 1992.

\textit{Understanding Local Participation}

Members of the municipal government have been very supportive of the APA since the beginning of the process. The development project interested municipal officials, but they were uneasy about the social and environmental impacts. Thus, they called the state environmental agency and organized negotiations for the creation of the Guaibim APA. They supported the participation of environmentalists in the discussions to avoid the possibility that they could block the approval process in the state environmental council (CEPRAM).

No rigorous studies occurred before the discussions started. Instead, municipal authorities attempted to determine what locals impacted by development, NGOs and state authorities thought about the proposed project. This process helped to open negotiation channels for later elaboration of the management plan, which defines land-use rules, and implementation of the APA guidelines. Municipal officials, together with state officials and consultants, managed without much conflict to elaborate the management plan and gain approval in the state environmental council (CEPRAM) in 1993. This was the first management plan ever approved by CEPRAM. The APA guidelines were later approved by the city hall.

The municipal government had assumed many of the tasks of enforcing the guidelines. The government created a municipal tourism and environment secretariat, and assigned employees to guide APA enforcement. Municipal officials learned through CRA how to screen development projects before sending them to CRA for approval. Municipal officials also enlisted locals to help enforce environmental rules, calling on CRA only when problems cannot be solved at the local level.

\textsuperscript{81} Information obtained from interviews with state environmentalists and former official in the state environmental agency.
In elaborating the APA management plan, CRA and the municipal government invited the local population to participate. Some landholders were concerned about land-use restrictions. Some protected areas had already been developed, especially shrimp farms, and landowners initially worried that APA would make them close down these farms. However, government officials guaranteed that no previously approved development would be affected by the Guaiabim APA. Although zoning restrictions were not imposed on properties with existing development, undeveloped areas with similar characteristics would be transformed into conservation areas.

Other landowners were concerned that a large development could spur unplanned development in the region, depreciating their property and bringing social problems such as squatting and high-density subdivisions. On the other hand, the same landowners were uneasy about APA restraints, as they expected to gain from growth of tourism by selling or developing their properties. Participants in the negotiations defined the land-use rules to preserve important ecosystems on all properties but to allow certain developments in areas already hosting human activities such as pastures or coconut plantations. All parties agreed that land subdivisions should be limited.

Municipal officials also had to work closely with landowners and locals to enforce APA guidelines. By doing so they helped publicize the APA and land-use rules; to ensure that landowners would consult local or state authorities before initiating any development.

To many locals, the APA seemed to work in their own interests. The APA guaranteed that the region would attract tourism investments that would increase property values, but would also curb longstanding problems such as poaching of coconut and timber and land squatting. Landowners had had to deal with poachers themselves, and fighting such invaders entailed personal risk. Moreover, poachers driven off the land simply returned again and again.

After creation of the APA, locals could count on municipal and state officials to support them in fighting these problems. The process of publicly denouncing some cases of poaching had brought some government officials to the region, cutting the number of incidents, according to local landowners. After that, poachers feared being caught and having to deal with government authorities. Cases of squatting had also increased in the region, especially in fragile ecosystems such as mangroves and the Atlantic forest. The enforcement of APA guidelines would protect landowners against squatters, again convincing state and local authorities to restrict such invasions. Landowners tried to convince APA administrators to restrain squatting from the beginning.

Tourism boomed in the APA and surrounding areas in the 1990s. Today there are over 1,400 lodging beds in the region (A Tarde, 1998c). With the growth of tourism, entrepreneurs created the Guaiabim Business Association to work together to solve common problems. The association had 17 members in 1998, many outsiders interested in developing

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82 From interviews with former local and state government officials involved in the process at that time.
83 Information obtained from interviews with landowners in Guaiabim area.
ecotourism locally. This association had worked in several areas, such as by offering tourism training courses for the local workforce, helping people obtain. These courses also trained government employees working in the region – one trained local police to work with tourists, for example. As of 1998 more than 200 people had been trained. The association has also held events such as a parachute tournament and exhibitions to advertise the region.

The association also concentrated its efforts on the environment. Solid waste was a big concern, and for years members had cooperated to clean the beach regularly. Although not much waste is produced locally, a lot of garbage from Salvador floats in on the tides. Now, after requests from the association, the municipal government is performing this task. The association now is working on organizing selective garbage collection to increase recycling, and some members had started to separate solid waste in their hotels. Members also posted signs about the importance of environmental preservation and created trails and organized guided visits to some ecologically beautiful areas, both attracting tourists and raising their consciousness of the need for environmental preservation.

In conjunction with the municipal government, the association had also funded environmental education at local schools. One major concern had been illegal hunting. Locals had traditionally hunted many animals, even some endangered species such as the local cayman. With the growing population, some animals that were once common had become difficult to spot. The association was trying to both raise children’s consciousness and ban hunting in the APA. To increase the impact of all these efforts, the association had continually tried to attract new members, especially small businesses such as food trailers on the beach.

*Summing Up*

In Guabim, municipal government and local actors, especially the business association and some local inhabitants, had provided significant political and institutional support for implementing and enforcing APA guidelines. The local government passed legislation that supports APA enforcement and created an agency to enforce APA rules. This agency now had the institutional capacity to screen projects, consult with the local population, and provide equipment and personnel for cleaning up beaches. Local non-governmental actors have contributed to enforcement by denouncing illegal activities. The local business organization had also organized a series of environmental initiatives.

Several factors seem to explain the high support for enforcement of APA guidelines in Guabim. First, the early involvement of local actors in the APA proposal and design of the management plan helped attract local political and institutional support for the newly established APA. Because the local government was fully involved from the beginning, it could acquire significant experience in APA affairs later used to enforce its guidelines. The early involvement of local actors also brought the support of local landowners, because they were well informed about the benefits of APAs and could negotiate land-use restrictions with state and municipal officials.
Local inhabitants had also given institutional support for APA enforcement because it curbed recurring problems such as coconut and timber poaching. Landowners benefit from the assurance that the area would not suffer uncontrolled development and squatting, which could depress property values. Finally, only one municipality a small number of landholders were involved in Guaiúmbi APA, facilitating the strong involvement of local actors in APA discussions.

6.3.2) Itacare- Serra Grande APA

History

Itacare APA was created by state decree on June 7, 1993 (see Table 4.7 for more details). It includes part of the territories of two municipalities: Itacare and Uruçuca. In the past, gaining access to the region was difficult since the roads linking it to the rest of the state were all unpaved. Only more adventurous tourists such as surfers and backpackers visited the region. Locals themselves experienced many problems with transportation. Bus service was scarce, slow, and unreliable, interrupted with heavy rains. Because of the isolation, important ecosystems in the region were still preserved, such as large parts of the Atlantic forest and mangroves. The main economic activities were traditional fishing, subsistence agriculture, and coconut and cacao production. Cacao was planted in a traditional way that preserved the vegetative coverage.

In the beginning of the 1990s, the state tourism plan proposed paving the 64.6-km road between Itacare town and Ilheus, the main regional center and gateway for the region (the airport is located there). There was tremendous local support for the project, as it would break down the isolation of the region and bring new economic development opportunities associated with tourism. At the same time, the State Secretariat of Culture and Tourism (Sectur) had plans to create the Itacare APA in an attempt to restrain unplanned development and try to preserve some environmental resources.

Sectur was designed as the initial APA administrator. It coordinated the elaboration of the management plan, which was created by an environmental consulting company. This plan was completed in 1996 and submitted for approval to the state environmental council (CEPRAM). APA guidelines constituted the environmental warranty for road construction. CEPRAM approved these guidelines in December 1996, and road construction started a few days later. In 1997, the town councils of both municipalities (Itacare and Uruçuca) passed laws ratifying the APA guidelines.

Local Support for the APA

The two municipal governments participated in the creation of the APA and in the road construction. In the beginning of the 1990s, during studies for the state tourism plan,

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84 The main urban center of Itacare, which is on the coast, is in the APA.
85 This system is called "Cabruca" plantation. It has been done traditionally for decades (V&S Engenheiros Consultores S/C, 1995).
86 Information obtained during the interviews with municipal officials and community leaders in Itacare.
Itacare municipality asked the state to make the Itacare-Ilheus road a priority (Prefeitura Municipal de Itacaré, n.d.). Tourism had started to grow in the region, and local politicians and entrepreneurs lobbied state government for infrastructure projects. Even before Itacare APA was discussed at the state level, members of the Itacare town council submitted a proposal for including the whole municipality in an APA (Camara Municipal de Itacaré, 1991). This proposal convinced the state government to endorse the creation of an APA in the region.

Itacare APA came with the support of local government and landowners, especially new owners who expected their land to increase in value with private investment in tourism. They expected that the preserved environment in their land was their main asset to sell their properties to tourism investors. Many locals also supported APA because they linked APA to tourism development, which meant economic opportunities (V&S Engenheiros Consultores, 1995).

Since the creation of the APA, Sectur held several events to promote the APA and inform locals about its meaning. Some of these events were public hearings designed to gather information for the management plan. Audiences for these events were large and diverse, including members of local NGOs, landowners, and entrepreneurs. Some events related to tourism development, such as training courses and a conference on tourism development along the southern coast of Bahia. The focus of a large number of these courses and meetings was on environmental protection and ecotourism.

These events on tourism and the environment seemed to have stimulated regional government environmental institutions. The events promoted by Sectur included many officials from environmental agencies and environmentalists in the region. During the meetings, these officials had not only an opportunity to speak to an audience of important local leaders but also to exchange ideas and information among themselves. The state and federal environmental agencies (CRA and IBAMA), which maintained local offices in Ilheus region, increased their number of employees and began to enforce environmental laws more strictly, especially those prohibiting deforestation. In the mid-1990s, IBAMA acted against several logging companies in the region and even closed down one of the last logging companies in Itacare, with support from part of the local population. To support enforcement, the state court system recently created a special environmental branch with regional public prosecutors (A Tarde, 1998a).

Local civil society had denounced environmental crimes and organized to influence environmental decision making and enforcement. Since the late 1980s, several NGOs were created in the region, some specifically to work in conservation areas. For example, Boto

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87 Later the town council abandoned this proposal till the state had the APA guidelines, which were approved as a municipal law in 1997.
88 Information obtained from an interview with a local official from the federal environmental agency.
89 These agencies had offices there to control other environmentally units, such as the Una federal ecological reserve and Lagoa Encantada APA.
90 There were six environmental NGOs in the region that includes the cities of Ilheus, Itabuna and Itacare in 1995 (Mater Natura, 1996).
Negro Movement had as its creation statement the legal and political defense of Itacare APA. One of the NGOs, Grama from the nearby city of Itabuna, was part of the state environmental council (CEPRAM). Grama used this vehicle to try to gain political support for regional environmental concerns.\(^91\)

These local groups participated actively in APA hearings. Some of these groups also expect to participate in the APA management council when it were established (V&S Engenheiros Consultores, 1995). The groups had also engaged in several environmental battles in the Itacare APA. For instance, protests organized by the NGO Boto Negro Movement forced the municipal government to discard the initial site of the sewage treatment plant, which would have been built in an area with mangroves.\(^92\) Landowners and tourism entrepreneurs also joined NGOs to denounce illegal logging in the APA and supported the federal environmental agency when it closed down a mill. Landowners from a private ecotourism reserve convinced the municipal government to change its solid waste storage location that abutted a preserved forest area.\(^93\)

**Summing Up**

Despite the many improvements in regional environmental management, problems remain. Although municipal laws support Itacare APA, municipal governments had not provided institutional support for the enforcement of APA guidelines. At the state level, after CEPRAM approved the APA’s management plan, Sectur had not given much institutional support to enforcement, moving its efforts instead to develop management plans for other APAs. The one remaining Sectur employee in the region focused on promoting tourism investments, not on environmental enforcement.

New problems had started to appear. Outsiders had begun buying the most potentially valuable land plots – those near the sea – from local landowners. These new landowners had blocked access to their property by locals using it for subsistence agriculture and fishing. This attitude generated a lot of conflict because locals had lived on and used the land for generations under sharecrop contracts with former landowners. For example, there were conflicts on the Conchas farm and in the Itacarezinho community (V&S Engenheiros Consultores, 1995). In the interior, landless peasants invaded two farms, which were later expropriated for agrarian reform. These settlements abut one of the main forested areas in Itacare APA. Expansion of these two invasions or a new invasion could threaten the forested land.

\(^{91}\) Interview with a leader from Grama.
\(^{92}\) In the end, the plant moved to another area.
\(^{93}\) According to an interview with Sectur officials.
6.3.3) Santo Antonio APA

History

Santo Antonio APA is located on the coast of southern Bahia in the municipalities of Santa Cruz Cabralia and Belmonte. The APA, created by a governor’s decree on August 31, 1994, includes some well-preserved Atlantic forest, mangroves, and cliffs. The main economic activities in the region were coconut plantations, extraction of straw (for roofs and brooms), subsistence agriculture, and fishing. More recently, tourism became an important activity as well, with the creation of several tourism businesses. Santo Antonio APA is near Porto Seguro (approximately 30 kilometers away), where tourism development saw a sharp growth in the last two decades (see Table 3.4). Tourism activities had also started to spill over neighboring municipalities. Porto Seguro is well connected to main road trunks\(^9\) and has a recently renovated international airport.

This APA was created in an attempt to control the environmental impacts of a 50-kilometer road between the towns of Belmonte and Santa Cruz Cabralia. This road was part of a series of infrastructure projects the state government has developed as part of the tourism development program – Prodetur. The road would ease access from Porto Seguro to new frontiers for tourism development next to underdeveloped beaches. The road was not part of the early state tourism plan. As the road project was introduced in 1994, the APA was proposed and quickly approved by decree.

The APA management plan immediately gained priority in the State Secretariat of Culture and Tourism (Sectur) because the APA was part of the environmental safeguards required by the InterAmerican Development Bank for releasing the loan for the road projects.\(^9\) Indeed, development of this plan jumped ahead of management plans from other APAs in Sectur. For example, Ponta da Baleia APA was created by Sectur in 1993, before the creation of Santo Antonio APA. Although the former had already been included in the state tourism plan, its management plan lagged behind\(^9\) because no infrastructure project in the region required environmental safeguards.

A consulting firm was in charge of generating a management plan under the supervision of Sectur in 1995. This work lasted for more than one year. After completion, the management plan was submitted to and approved by CEPRAM in 1997. Later, in 1998, the town council of Santa Cruz Cabralia approved the APA’s guidelines, making them a municipal law (Prefeitura Municipal de Santa Cruz Cabralia, 1998).

Local Participation in the Enforcement of APA Guidelines

During the development of the management plan, there were a lot of discussions about the proper zoning to be established in the region. Sectur has organized a few public meetings to discuss the creation of the APA. Many local authorities, especially the municipal

\(^9\) Such as BR-101 road that is one of the main roads in Brazil, connecting many states through their coasts.

\(^9\) Information obtained from an official in Sectur.

\(^9\) Up to October, 1998, Ponta da Baleia APA had not a management plan yet (CRA, 1998)
government of Santa Cruz Cabralia, questioned why some local rules were not being followed by the proposed zoning system. This municipality already had laws regarding the subdivision of land plots and building on the urban perimeter. Some of the state-proposed zoning rules seemed to contradict some of these laws.

The municipality convinced Sectur to change the initial zoning to increase the area in the zone for urban expansion (see ZEP I and II in Table 4.9) around the town of Santo Andre, the main urban area and tourism center in the APA. Business leaders of a planned tourism project in the region also pressured local and state authorities to change the initial zoning. Although the tourism project had already been planned and the land purchased, the initial zoning guidelines would have prevented its construction. Locals and municipal authorities supported the project, saying that it would bring jobs and income to the region. In the end, Sectur negotiated some changes in the project to improve environmental standards while revising the zoning to accommodate the project. The municipal government then enacted the APA guidelines as municipal law.

The process of establishing APAs in the municipality of Santa Cruz Cabralia affected its environmental institutions. The municipality created a new municipal secretariat of tourism and the environment to take charge of environmental responsibilities. Also, the municipal secretariat of public works had been very active in discussions concerning the APAs since it controls municipal land use. To deliberate about environmental matters, the municipality established a municipal environmental council (CONDEMA). The council had representatives of municipal secretariats and civil society, including the two environmental NGOs in the region (Ascæ and Flora Brasil), which are some of the most active members of the council. Ascæ had also participated in the state environmental council (CEPRAM) for many years. Over time, by participating in debates about other APAs, it had acquired much experience in analyzing management plans and projects and negotiating agreements. Indeed, CEPRAM appointed Ascæ to be its official reporter on Santo Antonio APA.

The debates and institutional changes sparked by the creation of APAs resulted in some municipal initiatives in environmental protection. For example, the municipality created a municipal park for protecting a highly visited island and coral reefs called Coroa Alta. The ecosystem was threatened by predatory tourism development. For many years, local boats were used to take tourists to this island without proper control on the number of visitors per day. Locals had also built several sheds on the island to sell food and drinks, all without permits. As a result of the establishment of the park, all sheds were removed, and the number of visitors is controlled by three municipal guards. A fee per visitor is charged to cover operational and maintenance costs.

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97 This project belongs to a large Brazilian business group called Bozano-Simonsen. It planned to invest US$ 200 to 300 million dollars in a high standard tourism complex with 2 five star hotels and 300 luxury houses plus entertainment amenities. Investors say the project will generate 1,300 jobs (Planarq, 1996).
98 Besides Santo Antonio APA, another APA, Coroa Vermelha, is located in Santa Cruz Cabralia.
Summing Up

Although some progress had been made in the management of Santo Antonio APA, there were still many gaps to be covered. A large part of this APA was in the municipality of Belmonte, which had made little effort to implement APA guidelines. There was no municipal law backing up the APA, and the municipality had shown little interest in making environmental protection an important part of its agenda. Most tourism development seemed to occur in the APA area in the municipality of Santa Cruz Cabralia.\textsuperscript{100}

For its part, Santa Cruz Cabralia institutionalized Santo Antonio APA guidelines at the municipal level, but it had not gone further. Although the municipal law legitimizing the APA establishes that the local government would help enforce APA guidelines, no institutional structure had been created to actually implement that those guidelines – contrary to the case of the municipal park, which had a self-sustaining implementation structure.

At the state level, Sectur had screened only a few big projects in the region. There was no institutional structure for performing regular visits and checking enforcement of the guidelines. All enforcement had depended on a few cases denounced either to Sectur or to CRA.\textsuperscript{101} Despite the existence of an experienced NGO, Ascae, which could strengthen enforcement, the NGO had not focused on implementing the APA management plan, but rather on other regional projects such as preparing to celebrate the five hundredth anniversary of Brazil in April, 2000.\textsuperscript{102}

6.3.4) Dunes and Lagoons of Abaete APA

History

Abaete APA was the second APA created in Bahia. It is located in Salvador, the capital of the state and the third-largest city in Brazil. The region is formed by dunes and lagoons rich in fauna and flora, especially migrant birds and orchids. Also, it has immense cultural value. African-Brazilian religions consider Abaete a sacred spot, and celebrated songs honor the beauty of the place.\textsuperscript{103} Thus, it is a popular visiting spot for tourists and locals.

Abaete APA was created in 1987 by a governor’s decree, but it took a long time for the APA administrator, the state urban development agency (Conder), to develop a management plan. The state had created Abaete APA to protect an important ecosystem from rapid urban growth in Salvador. In the past, the region of Abaete was distant from the urban centers and surrounded mostly by fishing villages. There was no real threat to its environmental resources. In the 1980s, the area experienced growing urban pressure, as the

\textsuperscript{100} Information obtained from interviews with government officials in both municipalities.
\textsuperscript{101} According to CRA and Sectur officials.
\textsuperscript{102} From interviews with Ascae members.
\textsuperscript{103} The most famous song to honor Abaete was composed by the famous Bahian composer Dorival Caymmi.
nearby Camacari Petrochemical Complex was established in the 1970s and roads were built to facilitate the development of the region.

Several developments threatened Abaete ecosystems. Middle-class high-rise condominiums were encroaching on the dunes from the east and north side, while slum dwellers were squatting on the south and west side. In 1980, the mayor of Salvador tried to create a municipal park in the area but it was not completely implemented. This project generated a lot of conflict with squatters and developers. Many people in the slums used the lagoons for fetching water, bathing, and washing clothes, and a speculator claimed he owned most of the area. In the end, 50 houses were torn down and some developers took the case to court (Veja, 1980). In 1987, there was still encroachment on the dunes, when Conder stepped in and created the APA. Since then, there have been many conflicts both with slum dwellers and developers. State authorities or courts have often ejected inhabitants or stopped development in the area.

At the time of the creation of Abaete APA, there had been no attempt to elaborate an APA management plan. Because large parts of the APA were private property with high market value, development restrictions were difficult to impose. The APA was created on paper, but there was no management plan to determine which areas should be placed under strict preservation. Meanwhile, development continued.

Local involvement in the APA

In 1988, an extra step was taken to protect the area: the municipal government of Salvador established a municipal park in the core of the APA. Some areas were expropriated to create the park. Still, little effort was made to implement and enforce the law. Government agencies, both state and municipal, lacked the experience, expertise, and funds for such tasks.

Until the mid-1990s none of the governments had come up with a management plan for protecting the region. However, in 1995, after Conder had worked on the Northern Coast APA, it began coordinating the development of the Abaete APA management plan. Consultants were hired to lead the work. The experience acquired in elaborating the management plan for Northern Coast APA gave Conder the credibility to handle this similar task, as well as leverage for requesting funds for managing other APAs.

Conder and the municipal government reached an agreement regarding the administration of the area. Conder would be the APA administrator and the guidelines it developed for the management plan would be incorporated in the municipal park with the approval of the municipal government. The plan was finished in 1997 and submitted for approval to the state environmental council (CEPRAM). Conder is now in charge of maintaining the park and enforcing protection guidelines. In 1998 alone, Conder spent almost US$ 1 million on Abaete APA, including to improve the visitors' infrastructure and expropriate property in areas of strict preservation (SEPLANTEC, 1998).

104 This municipal park was created by the municipal law number 32,915 of September 30, 1988. It includes 1,410 hectares out of the 1,800 hectares of the Abate APA.
During development of the APA management plan, Conder discussed its outline with several NGOs and community organizations. These groups provided much support, especially those representing upper-middle-class people who live near the protected area. These groups had denounced several environmental crimes. Developers and land speculators with major interests in the area had mounted the only resistance to the project.

But Still Conflicts ...

There had been tremendous public effort in the last 20 years to protect and restore one of the most fascinating places in Bahia. Local groups were supportive of the APA guidelines and helped enforcement. However, much coordination between the state and municipal public spheres was necessary. Despite threats from developers, public agencies had not acted together.

For example, in September of 1997, Pedra do Sal neighborhood association denounced irregularities in a development that had occurred in an area included in Abaete APA. The developer, MRM, held a municipal building permit, yet was breaking several APA guidelines and had no building authorization from the APA administrator, Conder. With the support of public environmental prosecutors, the neighborhood association went to court to stop the project, suing both the developers and the municipal government. The municipal planning agency, which authorized the project, argued that the development adhered to municipal law. However, public prosecutors argued that the development did not follow APA guidelines, and that the municipal agency could not authorize the project without consulting Conder (Ministerio Publico Federal, 1997).

The developers changed their strategy and tried to use their connections to gain political support (one of the developers is a relative of a state representative). In January 1998, some members of the municipal council tried to change the zoning rules to allow the development. However, community groups, with the support of some representatives, mounted a public protest and stopped the change. In 1999, the project was halted, but a court decision is still pending. 105

6.3.5) Mangue Seco APA

History

Established 200 years ago to support trade boats, Mangue Seco remained a small fishing village in the northern most point of Bahia’s coast until 1988. The village’s only means of access was still a boat from the neighboring Sergipe state. Then came an event that changed the fate of Mangue Seco: the largest Brazilian television channel (Globo) chose the area to film its new soap opera based on a novel (called Tieta) written by one of Brazil’s most famous writer, Jorge Amado.

105 According to the district attorney in charge of the case.
With the soap opera's success, tourists started pouring into the region to see the beautiful scenes they experienced on TV. Rapidly, small guesthouses, restaurants, and other tourism related businesses were opened. Many outsiders bought properties in the village to start their own businesses or to use them as second homes. Signs of environmental degradation began to appear. Buggies for rent went everywhere in the dunes, modifying their natural shapes and movement. Houses were built on fragile ecosystems such as mangroves or dunes. An old problem related to overgrazing of dune vegetation – the advance of the dunes toward the village – became critical.

Since the 1980s, a group of friends, mostly environmental specialists, was among the few visitors to Mangue Seco. They did not come only for pleasure but also to find out more about the environmental and social aspects of the region. Over the years, they created personal ties with local inhabitants.

In 1986, locals and some of those specialists formed a group called “Friends of Mangue Seco,” whose objectives were to preserve the cultural and environmental assets in the area and establish a conservation unit (CRA - Centro de Recursos Ambientais, 1994). They created a study group and submitted a research project to the state environmental agency (CRA) called “Combro Project.” CRA gave initial support to this project, establishing a group to perform the research. Several field research trips and meetings were organized in Mangue Seco on subjects ranging from environmental education, to studies of local fauna and flora, to environmental law enforcement. In the beginning, the project produced positive results. Some research was even presented in regional and national conferences. However, with the restructuring of the environmental agency, the project lacked funds, and the initial group was dispersed before finalizing the research.

In 1989, after the success of the soap opera, more tourists started to come, generating more impacts on the environment. Members of the local community and environmentalists (including some who had participated in the Combro Project) launched a campaign to preserve Mangue Seco. They organized several meetings and field visits and published material (brochures and posters). Environmentalists raised the issue in the state environmental council (CEPRAM).

In 1990, CEPRAM approved plans to study the preservation of Mangue Seco and suggested the creation of two conservation units: an APA and a biological reserve. Funds for establishing these units were requested from the federal government through the National Fund for the Environment (FNMA), but they were denied. However, in the same year, CRA proposed to CEPRAM the creation of the Mangue Seco APA based on Combro Project. Approved by CEPRAM, Mangue Seco APA was created by a governor’s decree in November 1991. In 1992, the CRA requested funds from the state treasury to finish the Combro Project field studies. At the same time, it created a research agreement for geological and physical studies in the APA with the Company for Researching Mineral Resources (CPRM), under the Federal Ministry of Mines and Energy. At the end of 1993, CRA finished the studies for the

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106 A survey showed 31 out of 63 houses were second houses in one community (Centro de Recursos Ambientais, 1994, p. 44).
management plan of the Mangue Seco APA and submitted it to CEPRAM shortly after. In 1994 this management plan became the second approved by the council.

Mangue Seco was the only APA to have the same government organization in charge of all responsibilities throughout the process of creation and implementation. Since the beginning, CRA developed, administered, and coordinated the management plan and enforced the environmental guidelines. The project challenged CRA in many ways.

First, the APA was the first to develop a management plan; CRA had no model to follow. The agency had to start from scratch. Though other agencies were developing plans at the same time, such as Conder, which was working on Northern Coast APA, they had experience in land-use planning and the help from consultants. Second, CRA had limited resources to hire outside consultants, so most of the work was done by its own employees. Unlike the other two agencies, which hired outside consultants, CRA could not count on the expertise and experience of consultants. The only outside help came from the group that started the movement to create the APA (Friends of Mangue Seco), and from the Company for Researching Mineral Resources (CPRM). However, with this project, CRA officials demonstrated that they had the technical capability to develop a APA management plan, thereby bringing more APAs under CRA control.

**Getting Locals to Support the APA**

Local communities were supportive of environmental initiatives in Mangue Seco. One of the reasons was that environmental degradation had caused various problems in the region over time. Dunes have invaded a large part of the village because cattle has removed much of the dune vegetation, which restrains dune movement. The river had advanced toward some areas in the village because of sedimentation caused by deforestation upstream. These problems forced many locals to move to other villages or build houses in other plots. Specialists estimate that 60 percent of the village area was lost owing to the advance of the river and dunes in the last 50 years (CRA - Centro de Recursos Ambientais, 1994).

In 1987, specialists who were members of Friends of Mangue Seco started to tackle these two problems, explaining to the population that they were caused by environmental degradation. Together with the local population, the specialists, and later CRA officials, planted vegetation to restrain dune movement and worked with cattle owners to keep the animals out of the dunes. When tourism boomed after 1989 and buggies overran the dunes, destroying planted vegetation and moving the sand even faster, CRA officials and locals worked with buggy owners to build a buggy route through the dunes. These two initiatives stimulated locals to support environmental preservation by enforcing the cattle and buggy rules and calling CRA when they needed help. Besides pursuing these initiatives, locals have denounced other environmental crimes, such as deforestation and overfishing. Locals have also worked together to maintain the original urban landscape. In the mid-1990s, they opposed paving some areas of the village to keep the original sandy floor.

In the mid-1990s, two other organizations became involved in managing Mangue Seco: Conder and the Brazilian State Oil Company (Petrobras). Since Mangue Seco was part
of the Northern Coast APA, its administrator, Conder, provided some institutional assistance. For example, Conder had worked on solid waste collection and disposal in Mangue Seco communities. Petrobras became involved after an oil spill from one of its ships in August 1997 (A Tarde, 1997), which drifted onto the beaches of Mangue Seco, causing protests and outrage from environmentalists. Petrobras was fined and had to clean up the pollution. After that, Petrobras has offered to finance a program to maintain beaches in Mangue Seco, providing employees and equipment for cleaning. Petrobras had also funded courses in tourism management and environmental education for local communities, organized by the municipality (A Tarde, 1998b).

**Summing Up**

The isolation of Mangue Seco makes it essential that private actors, the local government, and communities enforce environmental guidelines. CRA officials from Salvador take more than five hours to arrive in the area, so they come infrequently. Even officials from the municipal government headquarters in Jadaira take more than two hours to reach Mangue Seco.

Although CRA officials devoted much effort to enforcing APA guidelines, and the community was well-disposed to work with them, there was still a missing link in the management process. The Jandaira municipal government, where Mangue Seco is located, had not made much effort to help enforce environmental rules. A previous government (1992-1996) had financial problems and was embedded in corruption. The following government was recovering from this financial heritage and trying to build up its institutional capacity. There was a new municipal secretary for tourism and environment who was devoting much effort to working with CRA in Mangue Seco. However, he did not have the resources to implement extensive projects. He tried to be a bridge to request projects for the community, or to contact CRA in case of environmental problems.

**6.3.6) Tinhare-Boipeba APA**

**History**

Tinhare and Boipeba are two islands located in the municipality of Cairu. Before the 1980s, these islands were occupied by fishing villages and coconut plantations. The only way to gain access to them is by boat, and there are no roads or regular vehicles on the islands. This isolation has kept many important ecosystems such as mangroves and Atlantic forest almost untouched by human action.

Starting in 1980s, however, tourism grew steadily in the region, especially around the town of Morro de Sao Paulo on Tinhare Island. Tourists were attracted by the area’s tranquility and its beautiful beaches surrounded by a green landscape. With the increasing number of tourists, the town started growing to accommodate the demand for lodging, and to

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107 The mayor was involved in a series of embezzlement crimes and is accused of murdering a public prosecutor.
house the growing number of migrant workers. Like other small municipalities in Bahia, the local government had no institutional structure to control land use or prevent environmental degradation. Soon environmental problems appeared, such as soil erosion due to deforestation and littering due to inadequate solid waste management.

The growing number of environmental problems brought officials from the state environmental agency (CRA) to the region several times. To try to control the problems, they suggested creating an APA after getting the approval of the municipal government. CRA had confronted a similar situation in Mangue Seco APA, where growing tourism had also threatened the preservation of important ecosystems. CRA officials thought that they could develop a management plan much as they had in Mangue Seco, working with few resources and using CRA’s own staff for the studies. Thus, the perimeter for the APA was determined and the governor issued the creation decree in June 1992.

At that time, CRA was involved in developing the management plan for Mangue Seco and Guaibim APAs. CRA’s priority was to finish those plans and have them approved by the state environmental council (CEPRAM). Other state agencies, such as Conder and Sectur, were also creating APAs, and CRA needed to demonstrate that it could manage an APA efficiently and play an important role in creating future APAs. The completion of the management plan for Mangue Seco APA gave CRA the opportunity to start working on Tinhare-Boipeba APA.

However, the latter proved to be much more complex regarding the development of studies and surveys. It had an area more than twelve times larger than Mangue Seco APA, and a larger and more scattered population (CRA, 1996; Conder, 1998). Faced with these difficulties, CRA contacted Conder requesting support in performing the studies for the management plan. Conder had acquired extensive experience developing management plans for large areas while working on the Northern Coast APA. Conder began coordinating efforts to elaborate the management plan for Tinhare-Boipeba. It assigned a group of employees to work on the plan, many of whom had worked on the Northern Coast APA management plan, and filled out the group with staff from CRA. Conder requested funds from the state treasury and started developing the plan, which was completed in the beginning of 1998 and submitted to CEPRAM for approval in June 1998. Thus, Conder’s experience in working on a large APA was complemented by CRA’s experience working on an APA without much outside consulting.

Once the management plan was approved, CRA was supposed to enforce the APA guidelines, by investigating denouncements, making periodic visits, elaborating plans for environmental restoration, and screening development projects. However, this supervision did not occur. Instead, both agencies, CRA and Conder, tried to work on enforcing APA guidelines without much coordination. Conder had received some denouncements, but it has no power to penalize infractions. Although developers and the municipal government had sent to Conder development projects to be screened, the agency had no power to do that alone. Both activities should be performed by CRA, which was still the APA administrator. However, because of Conder’s early involvement in the management plan, it was able
become the link between the state and local actors. CRA had recently made efforts to assume the enforcement task and made stronger links with local people.

**Local Support for Enforcing APA guidelines**

The municipal government changed its involvement in providing institutional support for the APA administrator during the process of APA establishment. In the beginning, local politicians saw the APA as a means of getting the state to fund some services and infrastructure projects, such as better roads, equipment for solid waste management, and tourism promotion. However, as the years passed and state agencies did not do much in the APA, the municipality started to take a more active role in enforcing APA guidelines. In 1997, the municipal secretariat of agriculture was expanded to include tourism and environmental matters. The mayor of Cairu appointed an active municipal official to head this secretariat. A native of the region who had pursued a degree in agronomy and worked in organic agriculture, he studied the APA and its management plan and took several steps to enforce its guidelines.

A municipal environmental council was created to oversee these actions. This council was composed of fourteen members: seven from the municipal government and seven from organized civil society. The municipality had also built the institutional capacity to enforce APA guidelines and other environmental regulations.

First, it hired one full-time employee to take charge of environmental enforcement. It also contacted the federal environmental agency (IBAMA) to request training in monitoring overfishing and illegal dynamite fishing. Municipal officials learned how to restrain these offenses, such as by screening the size of fishing nets and spotting offenders. After training, the municipality agreed to assume IBAMA’s responsibility for combating fishing offenses at the local level. Municipal officials also contacted Conder and CRA to request more information about the Tinhare-Boipeba APA. They learned how to enforce land-use guidelines and started enforcing the zoning code as soon as it was approved by CEPRAM. Municipal officials acquired so much information about the zoning rules that they even questioned some inconsistencies that prevented them from enforcing APA guidelines. For example, they realized that some land plots divided before 1990 were smaller than the limit set by APA zoning codes, preventing effective enforcement of subdivision guidelines.

**Summing Up**

Several important steps were taken to establish the Tinhare-Boipeba APA and enforce its guidelines. However, several aspects made the enforcement structure incomplete. The APA management plan was developed long after its creation, so state and local actors lost some of their enthusiasm for enforcement of environmental guidelines. The APA appeared to be another law “only on paper.”

Nor did the municipal government and locals fully participate in the creation of the APA and the development of its management plan. Because of this, many APA rules conflicted with local rules, as in the land subdivision case. What’s more, the APA process did
not entail publicizing environmental rules or engaging locals in enforcement. At the state level, Conder and CRA did not coordinate their efforts, leading to a certain confusion and lack of enforcement from the beginning.

Cairu municipality had devoted tremendous effort to enforcing APA guidelines, but it had not approved them as municipal law. Such approval could legitimize APA rules and could prevent a future municipal government from changing its attitude toward the enforcement of APA guidelines.

Local civil society had not been involved significantly in enforcing APA guidelines. The municipal environmental council was the only means by which civil society could participate; there was only one environmental NGO in the APA created at the end of 1997. The development of the management plan did not stimulate environmental consciousness because of its delay and its lack of local participation.

6.3.7) Northern Coast APA

History

The Northern Coast APA was created as a tool for mitigating the environmental impacts of the 142-kilometer Green Line road from Salvador to Bahia’s northern border with Sergipe state. The road project was planned in the 1970s but was not implemented until the 1990s. In 1990, as the state tried to stimulate tourism development through public investment in infrastructure projects, the plan to build the Green Line road came into view again, and this time was implemented (see Section 5.2 on the Green Line road in Chapter 5).

After almost one year of discussions, the course of the road was defined. The idea of creating an APA to mitigate its impacts then appeared. This road would follow the coast at various distances from the sea. APA limits would be the Atlantic Ocean and a border running ten kilometers from the sea, from the beginning of the road to the state’s northern limit.

The APA idea arose from formal and informal conversations among high-level state officials during discussions of the Green Line road at the end of 1991 and the beginning of 1992. There were several debates about the best way to control the expected massive development that would follow road construction. Instead of trying to concentrate their efforts on environmental impact assessment, state officials focused on the important environmental resources located along the road, and how the state could protect them without spending a lot of resources on land expropriation.

At the same time, CRA was analyzing a tourism development project in Guaibim, a project that resulted in the creation of the Guaibim APA. There, a developer offered to protect the most important ecosystems on his property in order to build in other parts. CRA had also established the Mangue Seco APA around the end of 1991, which is also influenced by the Green Line road. But no APA had yet been implemented or had management plans; no one had a clear idea of exactly what the APA meant.
Despite these drawbacks, the creation of an APA as the magic solution for controlling environmental impacts appeared in discussions of the Green Line road. First, the notion of an APA combined the idea of protecting the environment with allowing development. This was exactly what officials of the state tourism development agency had in mind as a tool for low-density tourism. Second, there was no need to expropriate land, thus avoiding conflicts with local governments and landowners. At the end of the discussions, state officials decided that an APA would be the solution for environmental protection. After it became public, this decision was supported even by opposition members in the state senate, and by some environmentalists (Diário Oficial, 1992). Thus, the governor issued a decree creating the Northern Coast APA in March 1992.

High-level state officials decided to put the state urban development agency (Conder) in charge of coordinating development of the APA management plan. Conder had experience in planning infrastructure projects and the staff necessary for starting working on the plan. Also, agency officials thought that the road would affect the expansion of Salvador metropolitan area, and that urban planners would thus be needed to work on that, rather than the more conservation-oriented staff of the state environmental agency (CRA).

Conder put together a team to work on the project consisting of its own employees, national consultants, and a team from the U.K. Overseas Development Agency (ODA). Conder established a strict schedule for completing the management plan before road construction ended. In the same day the APA was created, the state opened the bidding process for road construction. The road would be ready in approximately two years.

The Difficult Task of Getting Local Support in a Huge APA

The task of developing the management plan involved several complex factors. The area was enormous – totaling 142,000 hectares (until 1999, it was the largest APA with a management plan). The APA included parts of five municipalities\textsuperscript{108} and approximately 25,000 inhabitants (Mendonça, 1997). This population was mostly rural or scattered through many small urban nuclei or villages, many very difficult to reach. The APA contained large areas with important ecosystems such as dunes, lagoons, and mangroves. Many of these ecosystems would be under extreme development pressure since most development would take place close to beaches.

Conder had to work with all five municipal governments and local populations to publicize the APA and collect data and input for elaborating the management plan. Some municipalities were sympathetic to the APA idea, but not all. Some municipal governments saw the APA as state interference in local matters, while others perceived it as an opportunity to receive something from the state. Conder organized several hearings in different locations and in the municipal capital towns. Although some meetings had a significant turnout and attracted the support of municipal governments, locals had very limited input in defining the management plan. The most interested parties were landowners and developers, who had

\textsuperscript{108} The municipalities and the percentage of their areas included in the APA were the following: Mata de Sao Joao (17.51%), Entre Rios (18.21%), Esplanada (13.98%), Conde (31.75%) and Jandaira (18.55%). Source: Mendonça, 1997.
acquired large plots of land in the region and expected to sell their land to tourism investors.\textsuperscript{109}

Conder did all the fieldwork in little more than one year, finishing the first draft of the management plan in mid-1993. This was submitted for approval by the state environmental council (CEPRAM). After long discussions, CEPRAM approved the plan in early 1995.

The enforcement of the APA guidelines had been problematic. Because Conder or CRA did not have local offices in the region, Conder planned to train local actors in enforcement to complement state institutional capacity both quantitatively and qualitatively, as local governments had more knowledge of local conditions. Some municipal governments were receptive to this idea and gave much political support to Conder and to the APA. For example, the municipalities of Esplanada and Conde approved the APA guidelines as municipal law, even before CEPRAM had approved them.

However, local governments had very weak institutional capacity for enforcing APA guidelines and very limited financial resources. None of the municipal governments had anyone with a college degree or a qualified technician who could work on enforcing land-use rules at the local level. Besides this, four of the five municipalities had their municipal capital outside the APA and had difficult road access to the APA area.\textsuperscript{10} None had any means for buying equipment to perform field visits.\textsuperscript{11}

Political support from municipal governments also differed among the municipalities and varied over time, with changes in the governments. For example, in the municipality of Entre Rios, the local government was very reluctant to cooperate with Conder in the beginning, but since elections in 1996 the new government had been more supportive. In Esplanada municipality, in contrast, the previous government was much more sympathetic to the APA than the current government.\textsuperscript{111}

Some municipal governments completely ignored APA guidelines by issuing construction permits that violated zoning codes and avoided screening by Conder. In two cases, the own municipal government undertook public works in the APA area without consulting Conder (Mendonça, 1997). Because of this unsteady municipal institutional support, Conder basically had to work alone in enforcing APA guidelines, even though it did not have enough staff for this task. Moreover, Conder had to rely on CRA for most of the field inspections, since CRA was the only agency that could legally enforce environmental guidelines. Thus, field inspections depended on the availability of CRA officials. Conder could not complement its institutional capacity with much municipal support because municipalities did not help much in informing the agency of field conditions.

\textsuperscript{109} According to interviews with local officials and population in the region.
\textsuperscript{110} The state had plans to improve the access from the municipal capitals to the Green Line road, once it finished the construction works in the latter.
\textsuperscript{111} Information obtained from the conversations with Conder officials.
\textsuperscript{112} Information obtained from interviews with Conder and municipal officials.
Support from local civil society was also very limited. First, the region had few organized environmental groups. The only two environmental NGOs in the region were in the southern limit of the APA and focused on very specific projects.\footnote{These NGOs were Tamar Project, a national NGO that protects marine turtles, and Fundacao Garcia D’Avila that has its own private reserve.} Second, the population was sparse and lacked education, which made it difficult to spread information and environmental education. In some villages, the illiteracy rate was over 60 percent, according to a recent survey (Mattioli, 1999). As a result, many locals were unaware that they were living in a protected area or did not know the meaning of an APA, even many years after creation of Northern Coast APA and all Conder’s efforts to publicize it (Mendonça, 1997). Conder received few complaints about environmental offenses, and those stemmed from individual initiatives.

6.4) Analysis of the Results

The state created several environmentally protected areas (APAs) and expected to count on local institutional support to execute the APA guidelines. Thus, the state would not have to dramatically increase its institutional capacity for enforcement once the management plans were approved by the state environmental council (CEPRAM). However, local actors had rarely assumed complete enforcement responsibilities, as state authorities initially intended. Not all municipal governments, communities, and NGOs had fully engaged in working on APAs. Table 6.4 presents the qualitative evaluation of local engagement in enforcement for all seven APAs, based on field research described in this chapter.

Table 6.4 - Characteristics of the seven APAs studied.

<table>
<thead>
<tr>
<th>APA Name</th>
<th>First Administrator</th>
<th>Area</th>
<th>Objective of APA creation</th>
<th>Number of Municipalities within the APA</th>
<th>Timing of involvement local actors</th>
<th>Approval of APA by local legislature</th>
<th>Level of involvement of local governments</th>
<th>Level of involvement of local actors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gualhím</td>
<td>CRA</td>
<td>small</td>
<td>Tourism project</td>
<td>1</td>
<td>Early (discussions on limits)</td>
<td>yes</td>
<td>high</td>
<td>high</td>
</tr>
<tr>
<td>Mangue Seco</td>
<td>CRA</td>
<td>small</td>
<td>Ecosystem protection against incipient tourism</td>
<td>1</td>
<td>Early (discussions on limits)</td>
<td>no</td>
<td>medium</td>
<td>high</td>
</tr>
<tr>
<td>Northern Coast</td>
<td>CONDER</td>
<td>big</td>
<td>Control impacts of a road</td>
<td>5</td>
<td>Medium (after defined limits)</td>
<td>2 out of 5</td>
<td>low-medium</td>
<td>low</td>
</tr>
<tr>
<td>Tinhare</td>
<td>CRA/ CONDER</td>
<td>big</td>
<td>Ecosystem protection against incipient tourism</td>
<td>1</td>
<td>Medium (after defined limits)</td>
<td>no</td>
<td>high</td>
<td>medium</td>
</tr>
<tr>
<td>Itacare</td>
<td>Sectur</td>
<td>big</td>
<td>Control impacts of a road</td>
<td>2</td>
<td>Medium (after defined limits)</td>
<td>yes</td>
<td>medium</td>
<td>medium</td>
</tr>
<tr>
<td>Santo Antonio</td>
<td>Sectur</td>
<td>big</td>
<td>Control impacts of a road</td>
<td>2</td>
<td>Medium (after defined limits)</td>
<td>1 out of 2</td>
<td>low-medium</td>
<td>medium</td>
</tr>
<tr>
<td>Abaete</td>
<td>Conder</td>
<td>small</td>
<td>Ecosystem protection against urban development</td>
<td>1</td>
<td>Late (after established)</td>
<td>no</td>
<td>low</td>
<td>high</td>
</tr>
</tbody>
</table>

\[113\] These NGOs were Tamar Project, a national NGO that protects marine turtles, and Fundacao Garcia D’Avila that has its own private reserve.
There are several factors that explain the lack of local political and institutional support for the enforcement of APA guidelines. First, many municipalities may not be pleased with the idea of having the state introduce environmental zoning systems that were not completely compatible with local politicians’ intentions. To get municipal support, state agencies tried to involve local actors in developing management plans, but in most of cases local inputs were limited or largely ignored by state authorities.

Second, environmental concerns may not be a priority on many local political agendas. Some governments may have competing political priorities, and the benefits that APAs may bring did not attract political and institutional support for their enforcement. Third, local governments and non-governmental groups often lacked the institutional capacity to assume these responsibilities, including qualified personnel, even though state agencies provided training to some municipalities.

Moreover, these factors can be affected significantly by local elections. For example, much of the training capacity can be lost when municipal governments turnover after elections. In addition, local political attitudes toward APAs, which restrict development and allow state interference in local land use, can shift radically from one administration to the next. A new municipal political administration can become more sympathetic to the APA idea than the previous administration, and vice-versa. Thus the priority level of environmental/APA matters on the local political agenda can shift substantially over time.

But what are the main factors that seem to influence engagement of local actors in the enforcement of APA guidelines? Based on the analysis of the seven case studies, three factors seem to be important: the objectives underlying APA establishment, the number of municipalities involved in the APA, and locals’ early participation in and benefits from APAs.

6.4.1) The Objectives of APA Creation Influence Local Participation in Enforcement

There are two basic types of APAs in Bahia. The first type includes APAs that were created to preserve important ecosystems threatened by different kinds of development, such as urban expansion and tourism. These APAs subject most of their area to strict conservation guidelines. APAs were used instead of parks because there is no need to expropriate private property when an APA is created. Examples of this kind of APA are Mangue Seco, Abaete and Tinhare APAs.

The second type corresponds to APAs that were created to mitigate the impacts of specific infrastructure projects in underdeveloped areas with fragile ecosystems, such as Northern Coast, Santo Antonio, Guaibim, and Itacare APAs. These projects could trigger a high demand for development; thus APAs were tools that the state used to avoid uncontrolled development, such as chaotic land subdivision and destruction of important ecosystems. These APAs were planned to allow mostly low-density/low-impact development, such as certain tourism resorts.
APAs of the first type tend to have a higher level of local involvement than the second type (see Table 6.4). In all three APAs of the former type, either municipal government or local inhabitants were highly involved in implementing APA guidelines. This involvement was a response to the increasing development pressures in the areas. In Mangue Seco, tourism activities were booming after the region became the setting of a popular television soap-opera, and this boom was worsening the problem of dune advancement. Locals were afraid that this problem would threaten the village.

Tourism was also booming in Tinhare APA. An active new public official used the APA to try to cope with chaotic land-use patterns. In Abaete, local neighborhood associations organized themselves to try to impede an apparently illegal new development in the APA. Uncontrolled development was putting the local environment at risk, and the creation of APAs underscored the concerns of local inhabitants and governments. With APAs, locals could make legitimate appeals to public institutions and media concerning actual violations; this is different from APA creation in the case of road construction, which poses only potential threats of uncontrolled development.

Compared with those of the first type, APAs of the second type developed their management plans and gained approval from CEPRAM much more quickly. The average time between the creation decree and the approval in CEPRAM was 24.8 months for APAs of the second type, but was 78.36 months for the first type (see Table 6.3). In all second-type APAs, development plans were about to be implemented.

For example, Guaibim APA guidelines were necessary to approve a private tourism project of great local importance. In the other second-type APAs, a public development project financed by external sources needed the APA to control the impact of future development. Agencies tended to prioritize these APAs to gain approval for projects from financial institutions (Bank of the Northeast and IDB). For instance, the Santo Antonio APA was created by Sectur after it had created many other APAs, but the former was the first to gain approval for its management plan from CEPRAM – a step needed to please donors who were financing the paving of the Cabralia-Belmonte road within the APA. However, the second type APAs had not mustered much local support for enforcement generally.

6.4.2) The Number of Municipalities Involved in an APA May Matter

Locals were likely to be more involved in enforcing APAs located in only one municipality. In all four APAs in this situation (Guaibim, Mangue Seco, Tinhare, and Abaete), either the local government or local inhabitants presented a high level of involvement in APA implementation (see Table 6.4).

First, the inclusion of only one municipality made the work of state agencies simpler regarding publicizing, training, and gaining local support through meetings and site visits. Agencies could focus their limited institutional resources on only that municipality, instead of dividing their attention between two or more. In APAs involving more than one municipality, the interaction among local governments was scarce or non-existent, making coordinated action difficult.
Second, local groups are small and usually act only in their own community or municipality. For instance, the inhabitants of the local village of Mangue Seco APA, the neighborhood association in Abaete APA, and the small business association of Guaiabim APA were actively involved in APA affairs, but in their municipality only.

Third, municipalities tend to get more involved in matters that are completely under their control. If an APA extends into more than one municipality, municipalities may not regard it as part of their affairs. For example, the municipality of Jandaira has advertised how it helps to protect the environment of Mangue Seco APA through pamphlets and booklets, but this municipality has not done the same for its Northern Coast APA, which encompasses other four municipalities.

Finally, many municipalities connected by an APA may have very little previous contact with each other, either because of their physical isolation or a lack of common interest in working together. For example, the five municipalities in the Northern Coast APA were isolated from each other before the road construction and had never worked together on any other issue. The creation of the APA brought them together for the first time. In some cases, various municipalities working together developed rivalries. In the same Northern APA, politicians in one municipality were upset with Conder – the state agency in charge of the APA – because it chose the neighboring municipality as a local base for launching field visits in the whole APA.

6.4.3) Participating Early in the Process and Benefiting from an APA

The engagement of municipal governments and civil society in enforcing APA guidelines varied with each APA case. The action of local inhabitants in overseeing and denouncing local environmental degradation is fundamental to implementing APA guidelines. State governments, and sometimes municipal governments, are too far away and have limited institutional resources. Moreover, environmentalism is almost non-existent in most APAs, which are generally located in remote areas where education and information are scarce. In addition, local inhabitants are themselves often responsible for violating environmental guidelines, because of a lack of information or a lack of incentives to conserve environmental resources.

In the two cases where local non-governmental actors were highly supportive of enforcing APA guidelines, local inhabitants not only were informed about APA rules but also benefited from government intervention. In these cases, local involvement was possible because the APAs covered relatively small areas and relatively few properties. Government officials were able to interact directly with the main actors.

In Mangue Seco APA, the main local village suffered from the advance of dunes toward the village, which could eventually cover the whole village with sand. The creation of the APA brought specialists from the state environmental agency (CRA) to help. They were able to stop dune advancement by replanting a local herb to contain sand movement. During this process, state officials distributed much environmental information among the locals. This information included the importance of avoiding environmental degradation to maintain
equilibrium in the dunes. Since then, locals had been attentive to cases of environmental degradation in the APA and have called CRA when they suspect illegal development.\textsuperscript{114}

In Guaibim APA, locals had denounced land invasions next to their properties, which sometimes involved reclaiming mangrove or dunes. They also confronted an old problem of coconuts and timber being stolen from their properties. Before, they had to fight by themselves, which involved personal risks. After the APA was created, locals benefited from municipal and state support in restraining land invasions and stealing timber and coconuts. So they could call municipal or state authorities whenever they suspect environmental offenses.

Guaibim APA presented the most effective structure for environmental management, according to the evaluation in this research, and attracted the most advanced municipal and local support. State and municipal legislation endorsed APA guidelines. The state environmental council (CEPRAM) approved its management plan. The municipal government had a structure to enforce APA guidelines. The state environmental agency was rarely activated, except in extreme cases. Also, though an APA management council was not formally constituted, local actors were informed about and supported APA enforcement. Moreover, the municipal government cleaned beaches periodically and organizes small restaurants along the beach in the local village. Local inhabitants supervised and denounced illegal land occupation and timber exploitation.

Discussion of the tourism resort in Guaibim had opened a channel for negotiation between state officials, municipal government, and non-governmental actors. The latter played an important role in defining local zoning for the management plan, facilitating support for enforcement of APA guidelines. State and municipal governments were also flexible in permitting previous development, such as shrimp farming, to continue. However, the undeveloped land under control of the shrimp farms was included in the APA. This agreement was approved by state and municipal laws.

In sum, several factors explain the enforcement of APA guidelines. The involvement of local actors is important, as it attracts local support to complement state institutional capacity. Although APAs created as part of environmental measures for development projects had more support at the state level for developing and approving their management plans quickly, they were not usually able to bring much local involvement. Those APAs established to protect the environment from actual development threats sparked more local involvement.

The early involvement of local actors legitimated the APA management plan. It also helped opening a negotiation channel with local actors for spreading information about environmental guidelines. In addition, local actors benefited from the APA, as the new guidelines helped curb old problems such as land invasion and illegal collection of timber.

\textsuperscript{114} Information obtained from interviews with CRA officials.
Also, instead of simply denying a construction license to developers, state officials negotiated project changes to ensure compliance with environmental constraints. These negotiations encouraged developers and local actors to support APA guidelines.

Municipal support for the creation and enforcement of APAs, through municipal laws and structures, has been vital. In principle, municipalities are responsible for land use. Municipal institutional support for APA guidelines had been high when APA land-use rules did not conflict with municipal interests and were legitimated by municipal laws. The involvement of only one municipality also helps explain the high involvement of local actors, as it gives the state flexibility to negotiate over development projects.

6.5) Prospects for Improving Enforcement and Monitoring

The state government in Bahia put a lot of effort into improving institutional capacity at the local level in order to transfer some enforcement responsibilities to municipal governments and other local actors. As we saw, the results of these efforts varied substantially. Some municipalities started to play active roles in enforcement, adding to the scarce local institutional capacity of state actors. In other municipalities, even after tremendous effort from state agencies in training and publicizing, local actors did little to help the state enforce APA guidelines.

The three factors mentioned in the previous sections help explain why local actors got involved in environmental enforcement and added to the state institutional capacity. However, much more research is needed to understand these local dynamics and engage local governments and populations in aspects of environmental management in all APAs. The strategy of state agencies was to devolve power to municipalities while playing a centralizing role in training, transfer of information, funding, and mediation in more complicated situations.

State agencies planned to gradually transfer responsibilities to local actors as each APA management council acquired institutional capacity. However, state agencies had little idea when municipalities were ready to assume certain responsibilities and how to determine whether municipalities were performing their new tasks well. Nor did state agencies put in place any plan to assess whether APAs were accomplishing their goal of protecting the environment.

The story at the state level offers some ideas on how to devise institutional mechanisms to monitor and control improvement of institutional capacity at the local level. From the institutional structure at the state level, two factors played important roles establishing APAs: a system of institutional incentives, and a central system of checks and balances to monitor the actions of state agencies. A similar system could be built at the local level.

Although states agencies previewed to establish municipal environmental councils to make decisions regarding APAs and oversee their implementation, this has never happened effectively. Only a few municipalities created environmental councils, but by their own initiative, such as the case of Tinhare-Boipeba APA.
A system of local incentives to create institutional support for APAs could be established with state encouragement. This system would constitute a system of checks and balances to monitor the performance of local actors. For example, state agencies could hire local institutions to perform some enforcement tasks in APAs, with state funding for environmental enforcement. These institutions could be municipal governments or agencies, or certified non-government organizations. The state funding could be used by local institutions to hire new staff and buy equipment for these new tasks.

For example, state agencies would train municipal agents in using the APA zoning system to screen projects and in checking environmental offenses. State authorities would steadily transfer responsibilities as they judge that local agencies are prepared to implement these new responsibilities. At first not all municipalities would be able to acquire the institutional capacity to take over environmental tasks in Bahia. The state might have to enforce APA guidelines for a certain period of time. This could be done by opening local branches to oversee APAs. However, state agencies could make a continuous effort to devolve APA enforcement to local institutions as they strengthen their institutional capacity.

After the transfer of responsibilities, state agencies could provide technical assistance and train local staff when necessary. From this point, state agencies would also monitor local implementors to check if they were performing the tasks according to the agreement between state and local agencies. State agencies could require a periodical report from local agencies on the number of inspections and the number of offenses discovered. State agencies could perform periodic surveys among the population to check the responsiveness of local agencies and randomly inspect new developments to oversee the performance of local agencies (see some indicators in Table A.3). Non-compliance with previous agreements would compromise the transfer of funding from state agencies to local agencies. In the last instance, state agencies would withdraw funding and take over the responsibilities from local agencies.

Another form of incentives would be the direct coercion of localities that receive state investment. State agencies would release funds for municipal projects only if guidelines had been enforced. In the case of this research, state agencies had the opportunity to exert this kind of pressure, but it was not used owing to pressure from important local constituencies and the lack of time to approve and implement development projects.

Moreover, state agencies could transfer state tax revenues to municipalities based on their surface under state APA. Some state governments in Brazil have already done this. The use of part of these resources to fund the enforcement of environmental guidelines by local institutions could be established.

Finally, state agencies need to periodically evaluate APAs regarding the condition of their environmental resources and potential new threats to environmental quality. Over time,

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116 As it was done in the beginning of 1999 by CRA.
117 This transfer of taxes is called ICMS Verde. States like Paraná in southern Brazil transfer part of the ICMS taxes (an important state taxes on the movement of goods in and out the state) to municipalities with protected areas. Although the amount transferred is not significant for the state, for many municipalities this amount added considerably to municipal budget, especially in the sparsely populated ones (Lopes et al., 1995).
this would serve to determine whether APAs are actually curbing environmental problems. Monitoring systems would be necessary for each of the APAs to check changes in the medium and long term based on social, land-use, and environmental indicators that could be a proxy of change, as Table 6.5 suggests. Monitoring systems could be used to redefine land-use rules in the APAs at regular intervals (such as every five years).
<table>
<thead>
<tr>
<th>Kind of Indicators of APA Effectiveness</th>
<th>Indicators</th>
<th>Possible Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Baseline Indicators</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>existent area of important ecosystems in the municipalities covered by APAs</td>
<td>Surveys, state and municipal government documents, documents from non-governmental organizations, remote sensing information, secondary research and site visit</td>
<td></td>
</tr>
<tr>
<td>existent area developed by any kind of human activity in the municipalities covered by APAs</td>
<td>Surveys, state and municipal government documents, documents from non-governmental organizations, remote sensing information and site visit</td>
<td></td>
</tr>
<tr>
<td>existent area accessible for tourists in the municipalities covered by APAs</td>
<td>Surveys, state and municipal government documents, documents from non-governmental organizations, remote sensing information and site visit</td>
<td></td>
</tr>
<tr>
<td>area of important ecosystem completely preserved in the municipalities covered by APAs</td>
<td>Surveys, state and municipal government documents, documents from non-governmental organizations, remote sensing information, secondary research and site visit</td>
<td></td>
</tr>
<tr>
<td>existent number of species endangered quoted by specialists in the municipalities covered by APAs</td>
<td>Surveys, state and municipal government documents, documents from non-governmental organizations, remote sensing information, secondary research and site visit</td>
<td></td>
</tr>
<tr>
<td><strong>Stress Indicators</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>incidence of water born diseases in the municipalities covered by APAs</td>
<td>Surveys, state and municipal government documents and hospital inquires</td>
<td></td>
</tr>
<tr>
<td>number of households/businesses with safe water in the municipalities covered by APAs</td>
<td>Surveys, census data and state and municipal government documents</td>
<td></td>
</tr>
<tr>
<td>number of households/businesses with sewage treatment in the municipalities covered by APAs</td>
<td>Surveys, census data and state and municipal government documents</td>
<td></td>
</tr>
<tr>
<td>water quality indicators (beach, streams and ponds)</td>
<td>Surveys, state and municipal government documents, and information from non-governmental organizations</td>
<td></td>
</tr>
<tr>
<td>population change in the municipalities covered by APAs</td>
<td>Census data, and state and municipal government documents</td>
<td></td>
</tr>
<tr>
<td>number of tourists per year and during the peak in the municipalities covered by APAs</td>
<td>Surveys, state and municipal government documents and private sector statistics</td>
<td></td>
</tr>
<tr>
<td>ratio of tourists per residents in the municipalities covered by the APAs</td>
<td>Surveys, census data, state and municipal government documents and private sector statistics</td>
<td></td>
</tr>
<tr>
<td>number of lodging facilities in the municipalities covered by APAs</td>
<td>Surveys, census data, state and municipal government documents and private sector statistics</td>
<td></td>
</tr>
<tr>
<td>number of lodging beds in the municipalities covered by APAs</td>
<td>Surveys, census data, state and municipal government documents and private sector statistics</td>
<td></td>
</tr>
<tr>
<td>number of jobs in tourism in the municipalities covered by APAs</td>
<td>Surveys, census data, state and municipal government documents and private sector statistics</td>
<td></td>
</tr>
</tbody>
</table>
CHAPTER 7 – CONCLUSION

7.1) Summary

This research has attempted to understand policy implementation in developing countries using the case of the creation of environmentally protected areas (APAs) in the State of Bahia, Brazil. An analytical framework was developed based on the four main obstacles to establishing protected areas identified in practice by the literature: lack of political support, lack of funding, lack of institutional capacity, and resistance of local actors.

My study was comprised of two stories. One focused on implementation of policy at the state level, and the other analyzed seven case studies at the local level. At the state level, the involvement of several state agencies in APA administration helped overcome the four obstacles described in the analytical framework. Thus, the state government was able to establish several protected areas in a period of approximately a decade. At the local level, a similar analytical framework was used to understand under what conditions local actors tended to provide institutional support to the implementation of APA guidelines.

Tourism projects triggered the involvement of key state agencies in the creation and administration of protected areas in Bahia. At the beginning of the 1990s, the Green Line road and the state tourism program reinforced the state’s commitment to tourism as a priority in its economic development strategy. With ecotourism in vogue, and pressures from local and external actors, state authorities created several protected areas in places already affected by tourism and in regions with tourist potential.

The state environmental agency (CRA), which might have been viewed as the natural administrator of protected areas, had little institutional capacity or experience with them. Thus, development-oriented agencies – the Company for the Development of the Metropolitan Region (Conder) and the State Secretariat of Culture and Tourism (Sectur) – had a “window of opportunity” to step in and establish protected areas on their own. Since protected areas offered the environmental safeguards required for some tourism projects, agencies created APAs as a way to control decisions concerning these projects. In so doing they hoped to minimize unexpected delays caused by environmental concerns and the bureaucratic procedures of other agencies. Protected areas also offered a chance to grab some political turf, since with more projects in their portfolio, agencies had the leverage to acquire additional financial and institutional resources.

My research identified the four main obstacles to implementation of protected-area policy, all overcome in the Bahia case. As the story at the state level in Chapter 5 explains, the decentralization of APA policy among several agencies – especially CRA, Conder, and Sectur – generated institutional, financial, and political support for implementing this policy, for several reasons. First, because public agencies depended on each other for approval of both APAs and development projects, they could minimize opposition and foster mutual support at the state level for the establishment of APAs. As a result, the number of APAs created during the 1990s was significant.
Second, the involvement of development agencies, which generally had more funds available for projects, injected considerable state financing into implementation of APAs. The amount of funding contributed by development agencies to protected areas was considerably higher than the total the state had previously invested in environmental protection. If APAs had been concentrated in the state environmental agency (CRA) from the beginning, that agency would have been unlikely to raise enough funding and develop the institutional capacity to implement all the APAs.

Third, state agencies had to increase their institutional capacity rapidly to handle the new task of administering APAs and obtain approval for them from the state environmental council (CEPRAM). The fact that CEPRAM had to approve development projects eased the resistance of environmentalists to allowing such projects in protected areas. The approval process certified development agencies’ ability to work with APAs and gave them leverage in establishing more APAs. This process generated competition among agencies for improving their institutional capacity to bid for more APAs.

Fourth, the expectation of potential benefits from tourism and public projects associated with APAs eased the resistance of local actors to establishing protected areas. It is doubtful that CRA acting alone, promoting such areas solely on the need to protect the environment, would have convinced local governments and landowners to give up some of their development rights.

The story at the local level presented in Chapter 6, drawn from the seven case studies, shows the difficulties and achievements of local implementation of APAs. The state planned to withdraw to a supervisory role when municipalities and other local actors, such as NGOs and the local population, had acquired enough institutional capacity to ensure APA enforcement and had established APA management councils. Local actors were expected to provide political, financial, and institutional support to APAs. However, the state expectation that local actors would match the state’s institutional capacity for enforcing APA guidelines was not fulfilled. Few municipal governments had extra funding or qualified personnel for enforcing APAs, and the local population and NGOs (when they existed) could provide only limited assistance. Although state agencies did create some institutional capacity at the local level by providing training and information, the state’s expectation that a significant increase in state institutional capacity at the local level was unnecessary was proved wrong in most of the cases.

Local results in implementing APAs and enforcing protected-area guidelines were mixed owing to the diversity of local conditions. Moreover, various APAs had existed for different lengths of time, and it may be too early to thoroughly evaluate the results in some cases. Nevertheless, this study allows us to draw some lessons for implementing environmental policy at the local level. In general, the seven cases showed that the involvement of development agencies, and the local expectation of economic benefits from tourism, were important factors in preventing local resistance regarding establishment of APAs.
Under these conditions, the seven cases also suggest factors that explain why and how some APAs received more local political, financial, and institutional support for enforcement. First, the motive in creating APAs was important in determining local support. This research identified two types of APAs: those created as environmental safeguards to public infrastructure projects, and those created to curb environmental problems caused by tourism or urban development. Although management plans for the former were approved in a timely manner, they could not muster as much local support for enforcement as the latter.

Second, APAs contained within a single municipality seem to receive more local support than APAs involving various municipalities. The state agency's interactions were simpler when it dealt with only one municipality than when it dealt with several, and agencies could concentrate their efforts and resources on one target. Third, the involvement of local actors in the early stages of the enforcement process facilitated local support. Besides opening a negotiation channel with local actors and disseminating information about environmental guidelines, early involvement legitimated APA management plans and fostered local support for enforcing APA guidelines.

7.2) Lessons for the Classical Implementation Literature

This study was influenced by, and could be included in, some of the classical implementation literature described in Chapter 2. As in the third generation of the implementation literature classified by Goggin et al. (1990), this research identified the key factors that were important in explaining implementation of APA policy in the State of Bahia. These factors were then combined to create an analytical framework that was used to understand the cases of policy implementation. Also in this research, as in some of the latest literature on developing countries, implementation analyses were based on cases where policy implementation actually was carried out with relative success.

The analytical framework developed in this research is primarily relevant to developing countries. I identified four constraints to the implementation of environmental policies: lack of political support at the central level, lack of financial resources, lack of institutional capacity, and resistance at the local level. Although these constraints could exist in any context, they express themselves differently in developed countries.

For example, lack of institutional capacity is a crucial constraint on policy implementation in many developing countries, especially with regard to equipment and human resources. This problem is less relevant in more developed countries, which tend to have stronger institutional capacity. The same is true for financial resources. Although some environmental policies in developed countries are restrained by lack of financial resources, funding is more problematic in poor countries.

The nature of political support for environmental policies also has different dynamics in diverse contexts. In developed countries, political deadlocks can occur when lobbyists try to block implementation of environmental policy. Opposing pro- and anti-environmental forces often battle. In developing countries, political problems result from a lack of environmental policies on the political agenda at all. Thus, the framework for this research
can be used to identify constraints on policy implementation, but it must be adapted to a specific context, such as international environmental policies, or local environmental policies in developed countries.

This research can also contribute to the debate between top-down and bottom-up approaches to implementing policy. Reflecting the trend of recent debates, the evidence in this research supports the claim that implementation requires components of both approaches (Najam, 1995). In Bahia, for example APA policy had a strong top-down component early on, when state agencies played a key role in promoting the establishment of APAs. At the same time, bottom-up actions also influenced policy implementation, especially at the local level, even in the beginning. For instance, the idea of creating APAs at the state level to mitigate the impact of development projects began with discussions at the local level, when a development project in Guaiabim resulted in the idea of the creation of the Guaiabim APA. In another case, in the Tinhare-Boipeba APA, the local government pursued the enforcement of APA guidelines on its own initiative and without much interference from state agencies. As these two examples in Bahia show, many policies that start as or look like straight top-down implementation are actually a combination of both approaches.

7.3) The Dual Mandate of Government: Development versus Environmental Protection

The role of the public sector in disciplining development has been essential. On the one hand, governments must react to private demands for investment in infrastructure and public utilities, because in many countries, including Brazil, provision of at least some utilities is assigned to the governmental sphere. These utilities include roads, airports, water treatment plants, sanitation, electricity, and telecommunication projects. In Bahia, various state and municipal development agencies were pursuing a series of infrastructure projects to foster tourism development on the coast.

On the other hand, government agencies must create and enforce rules for the use of environmental resources through land-use regulations, construction licenses, and projects that conserve fauna and flora—efforts that sometimes conflict with developmental projects, which may have the potential to cause serious environmental damage. In Bahia the State Environmental Agency (CRA) was responsible for enforcing environmental rules, which sometimes conflicted with development interests in the tourism sector.

How can government handle and integrate these two mandates? My research offers some lessons. The main one is the need to integrate environmental concerns with mainstream development discourse and practice in government. In the case of Bahia, environmental protection was a key aspect of the state strategy of tourism development, at least in theory. To acquire the political, financial, and institutional support to implement environmental policies, these policies had to be compatible with development objectives so development agencies would help implement them.

But how is this possible? How did it happen in Bahia? Four basic factors explain the involvement and interest of development agencies in pursuing environmental policies in
Bahia: market pressure, pressure from civil society and external actors, bureaucratic maneuvering, and financial incentives.

First, the marketplace for nature-based tourism and related investments has grown dramatically. Development agencies knew about this growth and created a strategy based on designing projects to attract investments in this kind of tourism. Environmentally protected areas were an important part of this strategy. For example, Sectur advertised APAs and their potential for nature-based tourism in brochures distributed to potential private investors (Bahia State Government, 1997).

Second, civil society and external actors pressured development agencies to adopt certain environmental safeguards. With the democratization of the country in the 1980s, environmental groups voiced their concerns and pressed development interests to be more environmentally friendly. In Itacare APA, for instance, pressure from local environmental groups changed the design of a sewage treatment plant that would have discharged its waste into a mangrove. International donors and banks were also increasingly requesting environmental guidelines as a condition of loan approval for development projects.

Third, development-oriented agencies have an interest in keeping environmental matters within their jurisdiction to avoid interference from other agencies. In this case, Sectur decided to retain APAs within its own jurisdiction because several infrastructure projects had APAs as environmental safeguards. Sectur did not want to depend on the state environmental agency to develop APA management plans because CRA could have significantly interfered in the design and schedule of Sectur's projects.

Fourth, involvement in the environmental "business" can enable an agency to attract funding from diverse government, international, nonprofit, and private sources. In Bahia, Conder received funds from the state treasury to develop the management plan for the Northern Coast APA, and from a technical agreement with the English ODA.

Environmental objectives must be integrated with mainstream development practice during implementation. For this to occur, development agencies should be allowed to pursue environmental policies, but with checks and balances. This entails changing environmental enforcement from the old-style environmental "police" – in which environmental agencies bullied and penalized offenders – to technical cooperation and implementation by other actors, public and private.

However, handing discretion over environmental issues to development agencies risks allowing such actors to undermine or neglect these responsibilities – akin to putting the fox in charge of the chicken coup. How can development agencies be prevented from appropriating the environmental agenda? The creation of oversight bodies is one approach. Handing more responsibility for implementing environmental policy to development agencies through decentralization should be followed by establishing more oversight mechanisms. Effective oversight requires clear goals measuring environmental performance and transparency and an independent body composed not only of governmental actors but also of NGOs and the
private sector. In the case of Bahia, the state environmental council (CEPRAM) filled this oversight role.

Institutional challenges stemming from the dual governmental mandate also occur at the local level. Local governments are in charge of many interventions that affect both economic development and environmental protection. Because of their different institutional contexts, state and local governments have different abilities and incentives to create and implement certain government interventions. Some of the incentives that influence state agencies may not exist at the local level. In the case of Bahia, state development agencies had at least two incentives to establish APAs: the availability of funds for environmental policies, and the opportunity to control environmental issues to avoid interference from other agencies. These incentives were not available to local actors on an ongoing basis.

Many local governments did perceive the creation of protected areas as an incentive to attract public and private tourism investments. This incentive helped state agencies obtain local political support for creating APAs – but not for enforcing or monitoring them, since once the APAs were created (with management plans) and development projects were approved, the incentives ceased to exist. Thus, the creation of more lasting incentives at the local level could foster more local institutional support for implementing environmental policies. For example, the state could give financial support to local institutions to perform certain enforcement tasks (see Section 6.6).

Therefore, integrating environmental protection into the development agenda must entail more than simply promoting economic investment to overcome the point when society can afford environmental amenities, as some proponents of the Kuznet curve suggest. To foster positive environmental change, governments can lubricate the development agenda by establishing incentives for environmental protection, and by introducing the political voice of civil society, internal actors within the government, and external actors in the development process. Creating incentives for government developmental agencies to act in an environmentally friendly manner, as well as opening channels for other voices, are important steps in integrating the two government mandates.

Thus the government policymaking structure is fundamental to effective implementation of a joint mandate. This case study showed that decentralization can help provide such institutional incentives for integrating environmental protection into the development agenda.

7.4) How to Organize the State? Centralization versus Horizontal Decentralization

The decentralization of protected-area policy in Bahia was crucial in generating a large number of APAs in the implementation stage. The conditions under which decentralization occurred placed protected areas in the mainstream development agenda. Thus, decentralization created an institutional synergy that generated political, financial, and institutional support for APA policy at the state and local level.

Decentralization without much coordination, but with checks and balances
The case of Bahia offered a different angle on the traditional decentralization/coordination challenge: decentralization without coordination, but with incentives and checks-and-balances. As discussed in Chapter 5, centralizing protected-area policy in the state environmental agency (CRA) would likely have failed, because that agency lacked the institutional, financial, and political support necessary to implement the policy. Decentralization involving other state agencies was the alternative.

The involvement of other agencies would, in principle, require some coordination to make sure each agency was fulfilling its role in the implementation process. However, the coordination problem did not undermine policy implementation in the Bahia case. Instead of distributing implementation tasks to different agencies and developing tight, centralized rules, the state government allowed agencies to establish protected areas without much coordination. Indeed, coordination was not strictly necessary because tasks were not complementary. Agencies developed the process for establishing APAs almost independently from each other. They could innovate in creating financial and institutional capacity by obtaining funds from different sources and developing the capacity they lacked.

Because of this independent process, state agencies in Bahia took different approaches to developing APA management plans according to their needs and capacities. CRA chose to do most of its work with its own resources and staff because it had limited funds for hiring consultants, and its staff members wanted to show that they could manage the whole process of APA implementation. Conder hired consultants to do the job in-house, so the agency could learn from that experience and add APAs to its portfolio of projects. Conder officials believed that this experience in land-use planning could make it the leading state agency in the APA "business." Sectur hired consulting companies to speed up development of APA management plans because it had a schedule for approving and building infrastructure projects, for which APAs were the environmental safeguards. Thus, lack of coordination did not lead to lack of implementation but provided agencies with the flexibility to overcome obstacles that impeded implementation.

Two factors contributed to effective implementation of APA policy: incentives and checks and balances. First, agencies were motivated to establish protected areas because doing so enabled them to increase their political power and financial resources. Development agencies, in particular, had an incentive to create protected areas to acquire more control over their development objectives, thus avoiding interference from other agencies, especially the environmental agency. Even though these incentives were not "planned" – they were already in place – similar incentives could be created in other institutional settings. For example, a government could make a centralized fund available to any agency involved in implementing certain environmental policies.

Second, in Bahia, a system of checks and balances governed implementation of environmental policy. CEPRAM members and CRA officials had to approve both APAs and development projects, blocking any that did not satisfy certain environmental guidelines. Thus development agencies could not create APAs only on paper; they also had to create APA management plans. Through incentives and checks and balances – which together
constituted a kind of carrot-and-stick system – agencies implemented APA policy in a decentralized fashion with minimal need for coordination.

**Beyond definitions of decentralization**

This research points to little practical use for the different types of decentralization identified in the literature. The main authors of that literature tend to categorize decentralization into various types, including deconcentration, devolution, fiscal decentralization, and privatization (Rondinelli, 1981; Cheema & Rondinelli, 1983; Manor, 1999). However, these categories do not shed light on how decentralization actually occurs, and on how it makes policy implementation more effective. Indeed, many cases, including the one in this study, combine all types of decentralization defined in the literature.

APA policy in Bahia encompassed degrees of horizontal decentralization, deconcentration, devolution, and privatization. The state government authorized several state agencies to establish APAs (horizontal decentralization). In turn, these agencies created local branches to execute some tasks (deconcentration), planned to transfer some enforcement responsibility to municipal actors (devolution), and hired some consultants and companies to perform another tasks (privatization). At the same time, a centralized system of checks and balances provided oversight for the whole process. Thus, rather than promoting decentralization for its own sake, analysts must go beyond theoretical definitions to learn what works based on empirical results.

**The forgotten type of decentralization: “Horizontal decentralization”**

My research presents another unusual view of the decentralization puzzle. Implementation of APA policy in Bahia at the state level was conducted mostly through “horizontal” decentralization – distribution of authority among several agencies at the same governmental level. Such cases are scarce in the decentralization literature. A large part of that literature focuses on "vertical" decentralization – the transfer of authority from central authorities to lower levels of government. Some experts in the field do not even consider horizontal decentralization. For example, my case study would not fit the definitions of decentralization presented by Cheema & Rondinelli (1983) and Manor (1999).

For these authors, true decentralization brings government closer to the population served, as in the case of devolution. This bias seems to result from the context under which the decentralization literature emerged in the 1970s: the failure of large-scale, centralized policies and the rise of democratic movements in many developing countries. The scant attention paid to horizontal decentralization may also reflect the scarcity of examples in the literature and in practice. Cases of horizontal decentralization are often portrayed as agencies squabbling for limited financial and institutional resources (MacKinnon et al., 1986). In the case of Bahia, such infighting did not occur because different decentralized agencies had opportunities to attract resources from different sources.

Horizontal decentralization, indeed, has advantages over both centralized and vertically decentralized structures. Horizontal decentralization entails different dynamics
from the most common approaches to vertical decentralization. Although the former does not present some of the supposed benefits of vertical decentralization, such as improved knowledge of local conditions and be close to the population, this research suggests that horizontal decentralization can foster interesting improvements in institutional capacity in developing countries, particularly in Brazil. For example, central governments (in this case, state government) tend to have more financial and human resources compared with local governments. Especially in the environmental field, municipalities often have weak institutional capacity and are unable to implement environmental policies alone. Owing to economies of scale, increasing the institutional capacity of a large number of local governments to implement many environmental policies without much central aid does not make sense. Implementation of APAs requires considerable institutional and financial resources, and municipalities are often unable to implement environmental policies alone. (As Table 5.3 shows, none of the municipal APAs had developed a management plan.) What's more, efforts to increase local capacities may not always pay off.

On the other hand, horizontal decentralization also offers some outright advantages over centralized implementation. For instance, different state government agencies attracted alternative human and financial resources for APA implementation, and the incentives encouraging development agencies to become involved in APA policy helped prevent the traditional polarization between development and environmental protection. Also, different agencies could innovate and adopt different solutions to implement APAs, increasing their institutional capacity as they faced different problems. Thus, horizontal decentralization can offer unusual approaches to effective policy implementation that surmount the presumed dichotomy between centralization and vertical decentralization.

The role of locals in decentralization

Local governments and non-governmental groups\textsuperscript{118} can play important roles in making and implementing policy. However, instead of blindly believing that they can and should be in charge of almost everything, policy analysts must reflect on the institutional limitations of local organizations. The ability of local actors to perform institutional roles depends on the kinds of policies in place and the institutional context in which they occur. In environmental policymaking, local actors can provide essential information, and may even prove to be the driving force. For example, in Guaiamí APA, locals played an important role in introducing and disseminating the concept of environmentally protected areas statewide. The state used the experience in Guaiamí to create other APAs and expand APA policy. The involvement of local actors can also determine the effectiveness of policy implementation. Locals helped establish APA boundaries and the kinds of land use allowed within their borders. Such involvement was essential in motivating local support for enforcing APA guidelines.

However, the role of locals in policymaking is limited by jurisdictions, economies of scale in institutional capacity, and the limitations of local political agendas. For example, in the case of protected areas, local governments cannot create protected areas beyond their

\textsuperscript{118} When I refer to local actors, or simply locals, I include both local governments and non-governmental groups.
political control. At the same time, many of these governments do not have the financial or human resources to sponsor studies to determine which important ecosystems should be protected. Similarly, protected areas may not rank high on municipalities’ agendas even though they contain unique and important ecosystems. A more central government confronts fewer policymaking limitations in many cases.

It is in the implementation stage that locals often contribute most to environmental policy. Locals can provide important support such as enforcement, monitoring, and adaptation of environmental policies. For example, in protected areas, locals can make periodic visits, investigate and denounce offenses, screen development projects, provide information on environmental quality, and help establish the boundaries of protected areas and their land-use rules, as in Guaibim. However, the kind of policy and the local institutional context can limit such support. Some local organizations (government and non-government) have very limited financial, human, and technical resources to devote to policy implementation. In Bahia, for example, land-use planning, a local responsibility, is barely pursued. Of 415 municipalities, only one, the state capital, had an approved master plan in 1997.119

In Bahia, state agencies involved municipal governments and non-governmental groups in APA implementation tasks, such as discussion and enforcement of management plans. However, in only a few cases did municipal organizations play the strong role state agencies had expected. This can be explained by a few factors. First, many municipalities lacked the institutional capacity to perform such tasks. Although state agencies invested some effort in local education, training, and outreach, the practical results often proved disappointing because of the short time frame allowed for such capacity building.

Second, municipal organizations had few incentives to engage in capacity building, project screening, and enforcement, as incentives to do so ceased once APAs were created. Third, no independent and centralized system of checks and balances tracked implementation of APA guidelines. Except for sporadic visits and denouncements, state officials did not monitor environmental quality or the performance of municipal governments in enforcing APA guidelines. Finally, many municipal officials are political appointees who can be replaced after elections, so the local government loses much of the enhanced institutional capacity it gains through training and education. Thus, central organizations must drive the decentralization process, continually developing local institutional capacity and providing a system of incentives and checks and balances.

The role of central authority

Decentralization should not be viewed as simply the complete transfer of responsibilities from central to local government. It also involves building capacity in the organizations that will perform new tasks – not only in the decentralized organizations but also in the central organization. Central governments have to maintain important roles even as they devolve power (Tendler, 1997), and building capacity for these new roles is necessary.

119 From interview with officials in Conder.
Decentralization must therefore be incremental for all organizations involved, both central and decentralized (Rondinelli & Nellis, 1986). In the Bahia case, central organizations (state agencies) were willing to devolve power to local actors, but could not always create the local institutional capacity needed to transfer responsibilities. State agencies provided some training and information, but they did not offer incentives for local implementation of APA guidelines based on a system of checks and balances.

Central government should play two basic roles in the decentralization process. First, it should create the institutional conditions – including the financial and human resources – decentralized organizations need to perform their new tasks. Central governments should also provide incentives such as fiscal decentralization or funding based on performance. Second, central governments should establish an independent system of checks and balances to oversee the decentralized tasks and provide a mechanism for resolving conflict. This system of checks and balances could link to incentives for good performance on decentralized tasks. Conflict resolution is needed in the event of disputes among decentralized organizations and/or clients (the public or firms). In Bahia, the state environmental council (CEPRAM) filled both functions, mostly at the state level. Because they participated in CEPRAM, civil actors such NGOs and union representatives played a somewhat independent role in settling disputes and overseeing the APA process.

7.5) Does the Bahia case suggest an effective way to deal with the environmental impacts of tourism development?

Debates over sustainable development often raise questions regarding what to preserve, to what extent, how, and for whom. In tourism development, these questions are particularly important, since tourism depends on a region’s social and environmental assets, and several conflicts can occur over these assets (see Appendices 3 and 4 for a more complete discussion). How can countries and localities balance environmental and development objectives in this arena?

Or, to ask the question more precisely for this case study: did tourism help protect the environment? There is no clear answer. This research did not assess whether tourism can protect the environment. Such an assessment would be difficult to perform properly. First, no comprehensive data are available to thoroughly evaluate environmental change over time in regions with APAs. Second, even if such data were available, determining causality between environmental protection and tourism development would be difficult. In many areas, tourism is one among many activities taking place. What can be said is that the notion of a win-win link between tourism and the environment can overcome the political, financial, and institutional obstacles to environmental policies such as the creation of protected areas.

Were APAs a promising solution for protecting the environment? Many APAs were in fact created to mitigate the environmental impacts of tourism development, such as roads, resorts, and tourism-related businesses. One could argue that if the objective of APAs is to protect the environment, no development project should go forward in the first place. On the other hand, if no development had been occurring, APAs would probably not have been
created. The existence of development projects was the key factor spurring the creation of APAs as an environmental management tool.

Many of the development projects within APAs had long been planned, and had the support of strong constituencies such as federal, state, and municipal governments as well as the local population. They were likely to be implemented anyway, sooner or later. For example, the Green Line road had existed on paper for 20 years. The regional tourism plan (Prodetur) was a regional priority and the federal government was distributing resources for it. The idea of creating a series of APAs in the 1990s resulted from these projects. APAs were mainly designed to appease local and external pressures for environmental safeguards for those projects, and to attract a certain niche of private investors (low-density nature-based tourism).

However, many APAs on the Bahian coast were suffering from rapid and chaotic tourism development before the 1990s. Local governments had little institutional capacity to control this development. Before APAs became popular, state government, too, had limited tools for interfering in private projects in areas already altered, such as those with coconut farms or cattle ranches. Development in certain regions was proceeding at an impressive pace with few environmental controls. Thus, APAs provided a powerful management tool to try to control new as well as old development pressures.

7.6) Concluding Remarks: Recommendations for Developing Countries

The dominant view of agencies in charge of environmental issues in developing countries is that they lack the institutional, political, and financial resources to fulfill the most basic environmental responsibilities. Governments in these countries are usually under pressure to encourage rapid economic development but also to tightly restrict their budgets. Environmental issues may appear in government discourse but they are hardly a priority, because they must fight for a share of a scarce public budget and are not often clearly associated with economic development. In this context, surmounting all the obstacles to implementing environmental policy effectively is a formidable challenge.

The Bahian case shows how to place environmental issues on the mainstream political agenda of developing countries. Instead of assigning complete responsibility for establishing APAs to the environmental agency, which would be unlikely to do the job well, the state divided responsibility among several agencies, which could attract more resources to APAs.

The growth of nature-based tourism also linked environmental protection with development and spurred environmental management in touristic areas. However, it is naïve to view ecotourism as a panacea for environmental protection in developing countries (Honey, 1999). Nature-based tourism requires the same amount of environmental oversight as other forms of tourism. The difference is the opportunity to identify environment and development as a win-win combination, thus fostering government and non-governmental support for the protecting the environment in the development process.

If governmental and non-governmental actors see the environment as an asset to be preserved, they will be more willing to invest political and financial support in preventing environmental destruction. Linking environment and development can also generate financial...
and institutional resources, especially from agencies associated with tourism development. Once such agencies associate environmental protection with the success of the tourism industry, they become more susceptible to working with local and external environmental actors.

The win-win association of protected areas with development in tourism zones was key to fostering support for those areas. The example of Bahia shows how tourism can be a tool for overcoming the four obstacles to the establishment of protected areas in developing countries. The same framework could be used to analyze similar environmental management tools in areas facing tourism development, such as provision of sewage treatment services and collection of solid waste. These tools can be clearly identified as win-win for tourism (sewage systems can maintain cleaner beaches, for example). However, governments must also establish the institutions for overcoming the obstacles to implementing these tools. The experience in Bahia offers some insight into how to arrange such governmental institutions, but further research is needed to provide clearer policy recommendations.

The Bahian experience was important because it showed that alternative institutional and organizational arrangements for making and implementing environmental policy can work under certain conditions. Perhaps these arrangements are not the way many policymakers and planners consider when they think about the “ideal,” and sometimes unrealistic, models of institutional structure to cope with environmental problems: (i) a strong and centralized environmental agency with money, police power and committed and well-paid staff to implement environmental policies, or (ii) a grassroots, completely devoluted and bottom-up system of policy implementation. Moreover, the Bahian solution may not be replicable in every country or region, or even prove to be a long-term alternative in Bahia itself, owing to varying economic, institutional, environmental, and social conditions.

However, this research shows that a second-best alternative can work relatively well, even if it is not the model that many planners have in mind. Indeed, the Bahian alternative may be the most effective solution to the environment/development challenge under existing conditions and constraints. My objective was to try to understand one alternative and provide planners with insights in applying some lessons from Bahia to other situations.

\[\text{120} \text{ Indeed, as mentioned before, all the APAs were put under CRA responsibility in 1999, after the field research was finished.}\]
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APPENDIX 1: THE BRAZILIAN NORTHEAST AND BAHIA

The Brazilian Northeastern region comprises ten states (Figure 1.1). The Northeast has an area of over 1.5 million square kilometers and occupies 28.3% of the Brazilian territory (Table A.1, Figure 1.1). Its population is 43 million inhabitants. It is greater than that of any other South American country, and the area of the Northeastern region is the second largest, only behind Argentina. Bahia State has the largest economy (GDP of 34.3 billion dollars) and population (12.276 million) in the region.

The economic and social indicators of the Northeast have lagged behind the rest of Brazil for many decades. For example, the Northeastern income per capita is only about half of the rest of the country and its illiteracy rate is more than double that of the rest of the country (Table A.1). The state of Bahia is slightly better off with a per capita income of 61% of the Brazilian average. In terms of income inequalities, its Gini coefficient is higher than the Brazilian one, which is one of the highest in the world. Particularly, the states of Pernambuco, Bahia and Ceara have the highest Gini coefficient in the country, respectively.

Table A.1 - Characteristics of three States and the Northeast compared to Brazil

<table>
<thead>
<tr>
<th>Region</th>
<th>Area (Km²)</th>
<th>Population (millions)</th>
<th>Per Capita Income (US$)</th>
<th>GDP (US$ Billions)</th>
<th>Illiteracy Rate (%)</th>
<th>Gini Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bahia State</td>
<td>567,295</td>
<td>12.276</td>
<td>2,709</td>
<td>34.3</td>
<td>35.3%</td>
<td>0.653</td>
</tr>
<tr>
<td></td>
<td>(6.6%)</td>
<td>(8.1%)</td>
<td>(61%)</td>
<td>(5.0%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ceará State</td>
<td>126,348</td>
<td>6.549</td>
<td>2,613</td>
<td>17.5</td>
<td>37.4%</td>
<td>0.647</td>
</tr>
<tr>
<td></td>
<td>(1.5%)</td>
<td>(4.3%)</td>
<td>(59%)</td>
<td>(2.5%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pernambuco</td>
<td>98,938</td>
<td>7.294</td>
<td>2,533</td>
<td>18.9</td>
<td>34.3%</td>
<td>0.660</td>
</tr>
<tr>
<td>State</td>
<td>(1.2%)</td>
<td>(4.8%)</td>
<td>(57%)</td>
<td>(2.7%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northeast</td>
<td>1,561,177</td>
<td>43.792</td>
<td>2,437</td>
<td>109.6</td>
<td>38.8%</td>
<td>0.651</td>
</tr>
<tr>
<td></td>
<td>(18.3%)</td>
<td>(28.9%)</td>
<td>(55%)</td>
<td>(15.9%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brazil</td>
<td>8,547,403</td>
<td>151.523</td>
<td>4,417</td>
<td>688.3</td>
<td>17.6%</td>
<td>0.637</td>
</tr>
</tbody>
</table>

For many decades, the Northeast has been a symbol of backwardness for many Brazilians and a challenge for regional policies to reduce the disparities between the Northeast and the most developed regions in the south. Since the 1950s, several regional policies have aimed at attracting national or international private investments through fiscal incentives and financing facilitation. There are two important public regional development institutions managing these policies in the region: the Bank of the Northeast and the Superintendence for the Development of the Northeast (Sudene). In the last two decades, the Northeast has attracted important investments in chemicals, pulp and paper, and textiles. However, these investments have been insufficient to foster sustained development and break the south-north disparities. More recently, in the 1990s, tourism was the focus of regional policy makers and the hope for economic development.
APPENDIX 2 – RESEARCH STAGES AND METHODS

The methodology consisted of collecting quantitative and qualitative information through data gathering and open-ended interviews with personnel in governmental, non-profit and private organizations involved in tourism and environmental decision-making in the Brazilian Northeastern region. My research was divided into three stages. First, I collected data and conducted interviews in the capital of the state, Salvador, where the headquarters of most of the state and federal agencies are located and some of the key actors in the environmental arena and tourism sector work. Second, I selected the seven case studies of Environmentally Protected Areas (APAs) for in-depth analysis based on the information collected in Salvador. Third, for the selected in-depth studies, I moved to the specific regions to complete interviews and data collection with local actors.

Evaluating APAs’ Creation, Implementation and Effectiveness

In the field research, I evaluated APAs by obtaining information and data on quantitative and qualitative indicators to assess the extent of creation of APAs, their implementation and their effectiveness to protect the environment. The selected indicators in Table A.2 and A.3 represent proxies for environmental management practices in tourism according to the World Tourism Organization (WTO & IISD, 1993). I attempted to collect information on all the indicators for the story at the state level and in the seven case studies of specific APAs for the stories at the local level. I explained possible changes in APAs’ creation, enforcement and effectiveness in managing environmental impacts using data information and open-ended interviews. I adopted two sets of indicators. The indicators in the first set are proxies to evaluate the extent to which APAs have been effectively created (Table A.2). These indicators are a sample of procedures that governments follow to give political, financial and institutional support to create APAs. The second set of indicators comprises measures of the proper enforcement of the APAs’ guidelines (Table A.3). It was not possible to collect all the indicators for all the situations, but I collected as many indicators as possible for each case study, depending on the availability of data and information provided during the interviews. These two sets of indicators reveal the extent to which governments have been able to succeed in offering and receiving political, financial and institutional support to enforce APAs’ guidelines. Based on these indicators, I focused the interviews on collecting information about possible changes in environmental policy-making, implementation and impact and about how these changes are related to tourism development and other activities, such as urbanization and growth in other economic sectors.
Table A.2 – Indicators of Creation of APAs

<table>
<thead>
<tr>
<th>Indicators of APA creation</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area officially protected</td>
<td>APA administrator and municipal governments</td>
</tr>
<tr>
<td>Area of important ecosystem completely preserved</td>
<td>APA administrator and municipal governments</td>
</tr>
<tr>
<td>Area allocated for visitor use</td>
<td>APA administrator and municipal governments</td>
</tr>
<tr>
<td>Area designated for development</td>
<td>APA administrator and municipal governments</td>
</tr>
<tr>
<td>Creation of environmental agencies or departments within agencies to work on APAs</td>
<td>Interviews, and state and municipal government documents</td>
</tr>
<tr>
<td>Number of environmental specialists in the government working on APA creation</td>
<td>Interviews, and state and municipal government documents</td>
</tr>
<tr>
<td>Existence of environmental regulations to back APA creation</td>
<td>Interviews, and state and municipal government documents</td>
</tr>
<tr>
<td>Financial resources invested in the creation and maintenance of protected areas</td>
<td>Interviews, and state and municipal government documents</td>
</tr>
<tr>
<td>Existence of tourism/environment training programs concerning to APA</td>
<td>Interviews</td>
</tr>
<tr>
<td>Change in the discourse about the environment</td>
<td>Interviews, state and municipal documents and newspaper articles</td>
</tr>
<tr>
<td>Existence of economic-based incentives for preservation</td>
<td>Interviews, and state and municipal government documents</td>
</tr>
<tr>
<td>Existence of a regional tourism development plan that takes into account APAs</td>
<td>Interviews, and state and municipal government documents</td>
</tr>
<tr>
<td>Enforcement Indicators</td>
<td>Source</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Existence of environmental regulations to back enforcement legally</td>
<td>Interviews, and state and municipal government documents</td>
</tr>
<tr>
<td>Number of infractions registered</td>
<td>Interviews, and state and municipal government documents</td>
</tr>
<tr>
<td>Number of regular inspection</td>
<td>Interviews, and state and municipal government documents</td>
</tr>
<tr>
<td>Change in the discourse about the environment supporting enforcement APA guidelines</td>
<td>Interviews, state and municipal government documents, newspaper and advertising</td>
</tr>
<tr>
<td>Screening of regional development plans</td>
<td>Interviews, and state and municipal government documents</td>
</tr>
<tr>
<td>Information distribution to population about APA guidelines and how to denounce infractions</td>
<td>Interviews, state and municipal government documents, newspaper and advertising</td>
</tr>
<tr>
<td>Creation of environmental agencies or departments to enforce APAs guidelines</td>
<td>Interviews, state and municipal government documents, newspaper and advertising</td>
</tr>
<tr>
<td>Number of environmental specialists in the government to work on enforcement of APA guidelines</td>
<td>Interviews, and state and municipal government documents</td>
</tr>
<tr>
<td>Financial resources invested in the enforcement of APA guidelines</td>
<td>Interviews, state and municipal government documents</td>
</tr>
<tr>
<td>Screening of private projects in APAs</td>
<td>Interviews, state and municipal government documents</td>
</tr>
<tr>
<td>Existence of economic-based incentives for denounce and preservation initiatives</td>
<td>Interviews, state and municipal government documents</td>
</tr>
<tr>
<td>Responsiveness to denounces of environmental degradation in APA</td>
<td>Interviews, state and municipal government documents</td>
</tr>
</tbody>
</table>
Field Research

The field research consisted of data collection and open-ended interviews. Data related to the development of tourism and environmental issues in the selected regions were available in the main sources of quantitative and qualitative information such as statistics and reports published by some governmental, non-governmental and private organizations. Open-ended interviews were carried out with some of the actual and former actors in the process of tourism and environmental policy-making and implementation in the specific states and regions. I went to the capital of the state for preliminary open-ended interviews with key actors before selecting specific APA case studies and going to the selected regions to perform in-depth studies. The field research occurred in different periods between August 1997 and August 1999.

In my open-ended interviews, I focused on important actors in the environmental and tourism sectors. Through site visits, I checked their opinions if and how changes in the environmental practices and institutions were introduced and implemented, how they influenced the creation of APAs, what their impacts were on the local environment, and how important tourism had been to spur such environmental practices. The sets of issues addressed in each interview varied according to the kind of organization and actors interviewed.

Interviews and data collection with government officials, members of the business community in the tourism sector and members of NGOs in the capitals of the state of Bahia (Salvador).

I interviewed (actual and former) personnel of the main government agencies involved in environmental policy and in the process of planning in the tourism sector. These included environmental agencies, governmental tourism agencies, state planning secretariats and financial institutions. In the business sector, I talked to business investors, managers and employees. Finally, I contacted members of NGOs in the state related to tourism and/or the environment.

In Salvador, my research involved the following organizations:

- Center for Environmental Resources (called CRA, or Centro de Recursos Ambientais). CRA is the state environmental agency under the State Secretariat of Planning. CRA controls Bahia’s environmental policy and management. It is in charge of the management of some of the Environmentally Protected Areas (APAs). In CRA, I collected data with and interviewed its director and the personnel in charge of licensing and administration of environmentally protected areas.

- State Secretariat of Culture and Tourism (Sectur). Sectur defines and coordinates state tourism policy. It decides on the main public investments on tourism and coordinates actions with other state and municipal agencies. In Sectur, I contacted the personnel involved in investment planning and coordinating tourism in the regions of my case studies.
- Bahia Tourism Authority (Bahiatursa). Bahiatursa is an enterprise formed by private and public capital in charge of promoting and monitoring Bahian tourism. Also, it manages some Environmentally Protected Areas (APAs) located in areas with tourism potential. I interviewed and collected data with officials who work in the environmental sector.

- Bank of the Northeast (BN). BN is the public development bank for the Northeastern region of Brazil. It is one of the main financial institutions acting in the region lending to the public and private sector. In the BN, I collected information regarding economic and financial aspects of the BN’s operations in the tourism and environmental sector in the region.

- Federal Environmental Agency (IBAMA). IBAMA is the federal agency in charge of implementing national environmental policies. In Bahia, IBAMA manages the national parks and biological reserves.

- Non-governmental and private organizations in Bahia involved with tourism or environmental issues. These include tourism entrepreneurs and unions and environmental NGOs.

In-depth study in the region of the selected case studies

In order to detail the functioning of APAs at the local level, after concluding the interviews in the state capital, I chose seven Environmentally Protected Areas (APAs) as in-depth case studies for another round of interviews and data collection focusing on the localities. All these APAs had management plans approved by the state environmental council (CEPRAM). There were two criteria for choosing these seven APAs out of the twenty-nine existent. First, in order to study the implementation process over time, I selected APAs that had creation decrees issued at least four years before I started my field research in September, 1998. Second, they had been implemented, at least in part. These seven APAs were the only APAs in coastal areas that had management plans approved by CEPRAM before September, 1998. The set of seven APAs represents a rich illustration of the environment under which APAs were implemented. These APAs were administered by various state agencies (CRA, Conder and Sectur) and were in different geographical regions. The seven case studies were: Guaibim, Mangue Seco, Northern Coast, Tinhare-Boipeba, Itacare, Santo Antonio and Abaete APAs.

I carried out open-ended interviews with regional government and business leaders, community leaders and important actors in the process of planning. In my open-ended interviews, I checked how APAs were implemented at the local level, what their impacts were on the local environment, and how they were related to tourism investments. In each of the localities, I conducted interviews and collected data in the following local organizations:

- municipal environmental agencies or secretariat
- municipal tourism agencies or secretariat
- branches of state or federal environmental agencies or secretariat
Field Research in Brasilia

I traveled to the Brazilian capital, Brasilia to gather information in the headquarters of the Brazilian Tourism Institute (EMBRATUR) and the headquarters of the Federal Environmental Agency (IBAMA).

The list of interviewees

Over one hundred and fifty open-ended interviews and field visits were executed between August 1997 and August 1999. Several of the interviewees did not want their names released and I could not get the names of many others (especially short interviews in the field visits). The formal relevant interviews (between 30 minutes and 2 hours) were made with the following persons (alphabetically ordered):

- Mr. Acir Padilha dos Santos, CRA (Santa Cruz Cabrália), coordinator of Santo Antonio APA.
- Mr. Agnaldo Green, president of the association of hotels, bars, restaurants and similar businesses, municipality of Itacaré (Itacare APA). Member Boto Negro environmental NGO.
- Mr. Algemar, advisor to the mayor of the municipality of Santa Cruz Cabrália, Santo Antonio APA. Former elected member of the city council.
- Ms. Ana Mota, Planarq Consultants (Salvador), consultant responsible for the management plan for Santo Antonio APA.
- Mr. Antonio, land registration office, municipality of Jandaíra, Mangue Seco and Northern Coast APA.
- Dr. Antonio Sérgio, state public attorney, environmental specialist, Bahia State justice department.
- Mr. Arnauld, landowner and bar owner, municipality of Itacaré.
- Mr. Benedito Correia, secretary for the environment, municipality of Porto Seguro.
- Ms. Carla Fabiola Pereira Ribeiro, CRA (Salvador), coordinator of the Northern Coast and Mangue Seco APAs.
- Ms. Cássia Boaventura, coordinator of the Porto Seguro branch of the Institute for the Preservation of the Historical Properties (IPHAN, a federal public institution).
- Mr. Cleber Isaac Soares, landowner/entrepeneur, owner of São José Farm, Itacaré APA.
- Ms. Ceonilce Almeida Pinto, public official, Ceara environmental protection agency (SEMACE).
- Ms. Dalva Garcia Santana, tourism specialist, Sectur (Salvador), worked Prodetur in the coordination of Porto Seguro’s tourism council.
- Mr. Danilo Lopes, Bank of the Northeast (Fortaleza), coordinator environmental department.
- Mr. Delivaldo dos Santos, CRA (Salvador), coordinator Tinhare-Boipeba APA and coordinator of the CRA’s Atlantic Forest Conservation Project in Bahia.
- Ms. Deodir, Conder (Salvador), coordinator of accounting office.
- Ms. Dione Corte, IBAMA (Brasilia), planner, specialist in protected areas.
- Mr. Durval Olivieri (two interviews), CRA (Salvador), former general director of CRA between 1991 and 1998. Currently he is special advisor to the Secretariat of Planning, Technology and the Environment in Bahia.
- Mr. Edmundo Tavares, tourism entrepreneur, municipality of Caraívas, Trancoso APA.
- Ms. Elizabete, CRA (Salvador), coordinator of Coastal Management Program (GERCO).
- Mr. Francisco César Rodrigues Pimentel, Bank of the Northeast (Fortaleza), coordinator of the policy department.
- Mr. Frederico Mendonça (two interviews), Conder (Salvador), coordinator of the Northern Coast APA during the development of its management plan.
- Mr. Geraldo Aquino, CRA (Salvador), coordinator of the protected area group.
- Mr. Gerardo Schmidt, director of the Department for Forest Development, state secretariat of agriculture and forest (Salvador).
- Mr. Gonçalves, secretary of tourism and the environment in the municipality of Conde, Northern Coast APA.
- Mr. Gordilho, secretary of public works at the municipality of Santa Cruz Cabralia, Santo Antonio APA.
- Ms. Graça Gondim, Sectur (Salvador), official at the Sectur’s Superintendence of Tourism Development (Sudetur).
- Mr. Godoy, environmental activist and shop owner, village of Mangue Seco, Mangue Seco APA, municipality of Jandaira.
- Mr. Heron Santana, state public attorney, environmental specialist, Bahia State justice department.
- Ms. Ida Rosatelli, hotel owner and member of the Porto Seguro tourism council.
- Ms. Inês Garrido, Sectur (Salvador), tourism specialist working on APAs.
• Mr. Jacó, former mayor of the municipality of Jandaira, Mangue Seco and Northern Coast APA.

• Mr. Jacozinho, municipal tourism secretary, Mangue Seco and Northern Coast APA, municipality of Jandaira.

• Mr. Jaime Matos, secretary of tourism, municipality of Itacaré.

• Mr. João Saraiva, president of the Green Party, Ceará branch.

• Mr. Jorge Everaldo, secretary of economic development in the municipality of Entre Rios, Northern Coast APA.

• Dr. José Geraldo de Oliveira, professor, Federal University of Ceará, director Center for Graduate Studies on the Environment.

• Mr. Júlio Cesar, municipal secretary of agriculture and the environment in the municipality of Valença, Guaibim APA.

• Ms. Kikiu Gonçalves, environmental activist, municipality of Itacaré.

• Ms. Leila Murici Torres, CRA (Ilhéus), coordinator of the Itacaré APA.

• Ms. Lívia Gabriele, Conder (Salvador), coordinator of development of management plan for Tinhare-Boipeba APA.

• Mr. Lucas Materron, Flora Brasil environmental NGO (Santa Cruz Cabralia, Santo Antonio APA), member.

• Mr. Luís Osvaldo dos Santos, municipal tourism secretary, municipality of Icapuí (Ceará State).

• Ms. Malu Miranda, municipal secretary of tourism, Santa Cruz Cabralia, Santo Antonio APA.

• Ms. Margarete Grillo, Fernando de Noronha administrative office (Recife), environmental and tourism department.

• Dr. Maria Gravina Ogata, environmental lawyer and researcher in SEI (Bahia State Center for Economic and Social Studies, a state institution).

• Ms. Maria Teresa Sales, Ceará environmental protection agency – SEMACE (Fortaleza), coordinator of the Baturite APA.

• Ms. Maria Tereza Stradmann, GAMBA environmental NGO (Salvador), staff, biologist, advisor in the Atlantic Forest Network (a nation wide network of NGOs working on the defense of the Brazilian Atlantic Forest).

• Ms. Maridalva, official in the department of registration of federal state property.

• Dr. Marieta Borges, Fernando de Noronha administrative office (Recife), historian specialist.

• Ms. Marina Beltrão, Conder (Salvador), deputy director.
- Mr. Marlon, member of the Movement for the Preservation of Porto Seguro, environmental NGO, municipality of Porto Seguro.
- Ms. Marta Bezerra, Vice-mayor in the municipality of Mata de São João, Northern Coast APA.
- Ms. Milene Maia, official in the secretariat of the environment in the municipality of Porto Seguro.
- Mr. Miguel Ballejo, member of the municipal city council, Brazilian Green Party, municipality of Porto Seguro.
- Mr. Moisés, theater teacher and environmental/social activist in the municipality of Belmonte, Santo Antônio APA.
- Ms. Myrtis Souza, Bank of the Northeast, economist and tourism specialist.
- Mr. Nequinha, member of the local commercial association, village of Mangue Seco, Mangue Seco APA, municipality of Jandaira.
- Mr. Norival, member, Grupo Calango environmental NGO, Camaçari.
- Mr. Paulo César Magalhães, municipal tourism secretary, municipality of Porto Seguro.
- Mr. Pedro Azevedo, municipal secretary of agriculture, tourism and the environment in the municipality of Cairuí (Tinhare-Boipeba APA).
- Ms. Raimunda, community leader at Mangue Seco APA, Mangue Seco village, municipality of Jandaira.
- Ms. Raquel Matedi, Professor at Facs College (Salvador), sociologist in charge of an evaluation of the social conditions in the Northern Coast APA.
- Mr. Raul, public works engineer at the municipality of Santa Cruz Cabrália, Santo Antônio APA.
- Mr. Reinaldo Dantas, Sectur (Salvador), Director at the Sectur’s Superintendence of Tourism Development (Sudetur).
- Mr. Renato Cunha, Gamba, environmental NGO (Salvador), coordinator and member of the state environmental council (CEPROM).
- Mr. Ricardo Ari, biologist, CETREL (environmental treatment company for the Camaçari Petrochemical Complex)
- Mr. Ricardo Montagne, ASCAE environmental NGO (Santa Cruz Cabrália), director, member of the state environmental council (CEPROM).
- Mr. Roberto, environmental enforcement staff in the municipal secretary of agriculture, tourism and the environment in the municipality of Cairuí (Tinhare-Boipeba APA).
- Mr. Roberto Barreto da Silva, CRA (Salvador), coordinator Ponta da Baleia and Trancoso APAs.
- Mr. Roberto Morais, Federal University of Bahia (Salvador), Professor.
- Mr. Romeu Fontana, historian, municipality of Porto Seguro.
- Mr. Ronaldo Lirio, consultant, former CRA official.
- Mr. Ronaldo Martins, CRA (Salvador), manager for environmental evaluation and control.
- Ms. Rosane Garrido, Conder (Salvador), staff member in the development of the management for Tinhare-Boipeba APA.
- Ms. Rosângela, municipal secretariat of tourism in the municipality of Valença, Guaíbim APA.
- Mr. Saraiva, Grupo Germen, environmental NGO (Salvador), coordinator and member in the state environmental council (CEPRAM). He is also official in the Urban Development Department in the municipality of Salvador.
- Dr. Sérgio Mendes, public attorney, coordinator of the environmental public attorneys in the state of Bahia.
- Mr. Severino Agra Filho, Federal University of Bahia (Salvador), Professor in the Interdisciplinary Nucleus of Environmental Studies.
- Dr. Silvia, professor, Fortaleza University (Fortaleza), tourism specialist.
- Ms. Socorro Mendonça Vasconcelos, Sectur (Salvador), accounting official at the Sectur’s Superintendence of Tourism Development (Sudetur).
- Ms. Vera Mendes, Sectur (Salvador), environmental specialist working on APAs.
- Mr. Walmir do Carmo, GRAMA environmental NGO, coordinator, member of the state environmental council (CEPRAM).
- Mr. Walteco, official in the public work secretariat, municipality of Jandaíra, Mangue Seco and Northern Coast APA.
- Mr. Wilson Espanhol, hotel owner and director of the Hotel Association of Bahia (Porto Seguro).
- Mr. Wolf, Sectur, coordinator of the management plans for Sectur’s APAs.
APPENDIX 3 – IMPACTS OF TOURISM

The literature on tourism has evolved over time, shifting the way of stressing the different facets of tourism’s impacts. In the 1960s and until the middle of 1970s, research about the impacts of tourism looked almost exclusively at its positive economic impacts on local, regional and national economies (Mathieson & Wall, 1996). Tourism was viewed as a means of improving the balance of payments, employment, income and tax revenues (World Bank, 1972; Peters, 1969). In the 1970s, research on the negative effects of tourism started to emerge (Hall, 1970; Young, 1973; Turner and Ash, 1975; Graburn, 1976; Smith, 1977; Pizam, 1978). Social and environmental impacts of tourism started to come to light in places like the French Riviera and Acapulco in Mexico (Bosselman, 1978). In these places, tourism had potentially altered traditional culture, degraded landscapes, encouraged prostitution, increased criminal behavior and destroyed the local environment (Mathieson & Wall, 1996).

By the 1980s, researchers and policy-makers agreed that tourism in the way it was developed had tremendous negative impacts, and preventive and reactive measures to prevent or mitigate these impacts ought to be in place (OECD, 1980). Also, in the middle of 1980s and 1990s, with the spread of the idea of sustainable development, efforts to reconceptualize new forms of tourism with low or no impact on the environment emerged, including ecotourism, nature tourism and soft tourism. All definitions share the idea that tourism could contribute to the preservation of the environment if it is planned and implemented in an environmentally and socially friendly manner. Tourism, thus, has reborn as a possible tool to spur economic development while at the same time benefiting the environment and local social conditions (Ceballos-Lascurain, 1988; Whelan, 1991; WTO & UNEP, 1992). However, most recently, several authors have expressed skepticism about the achievable benefits of ecotourism and suggested that ecotourism is just another fad (Wilkinson, 1992; Pleumarom, 1994; Munt & Higinio, 1997; Machlis & Bacci, 1992, quoted by Ceballos-Lascurain, 1996). Thus, even though there are several decades of research and debates about tourism, widely-accepted procedures to analyze the impacts of tourism do not yet exist (Mathielsen & Wall, 1996).

The social and environmental impacts of tourist activities depend on two sets of factors (Briassoulis & Van der Straaten, 1992). On the one hand, these impacts are the result of the kind and intensity of these activities such as the quantity of tourists, the characteristics of these tourists, the distribution of the impacts spatially and temporally and the kind of tourist activity involved. On the other hand, these impacts depend on the characteristics of the impacted environment and society. The local environment and society has a limited capacity to absorb and recover from impacts of tourism, the so-called carrying capacity. Other terms include nature-based tourism, nature-oriented tourism, wilderness tourism, adventure tourism, green tourism, alternative tourism, sustainable tourism, appropriate tourism and low-impact tourism (Ceballos-Lascurain, 1996).

121 Other terms include nature-based tourism, nature-oriented tourism, wilderness tourism, adventure tourism, green tourism, alternative tourism, sustainable tourism, appropriate tourism and low-impact tourism (Ceballos-Lascurain, 1996).

122 For details about the characteristics and how to design alternative tourism see Ceballos-Lascurain, 1996.

123 The concept of carrying capacity comes from population models in ecology (Coccossis & Parpairis, 1992). Ecologists have tried to determine mathematically the maximum population of certain species based on the limitation of certain resources, such as water or food.
In tourism, the carrying capacity can be defined as the maximum level of recreation use that can take place in certain place without having significant impacts on this ecosystem. If these impacts exceed the carrying capacity, their effects on the environment and local society can become irreversible and cause serious environmental, social and cultural problems. Thus, the estimation of the carrying capacity of a certain environment is fundamental to determining the limit for tourism development in a region.

However, assessing the impacts of tourism development and the carrying capacity of a place is a complex task because tourism is not a single well-defined activity, but rather a set of several activities, such as transportation, building construction, lodging and recreation (Briassoulis, 1995). Moreover, any assessment of the ultimate impacts of tourism implies not only the direct impacts of all its related activities, but also the interaction among all these activities.

The impacts of tourism on society can be divided into positive and negative (see Table A.4 a summary of the negative and positive impacts of tourism). However, the distribution of these impacts is not even among all the stakeholders (Lovel & Feuerstein, 1992). Some stakeholders make significant gains while others gain much less or even lose. Also, there are different views about the impacts of tourism. For example, some locals can see tourists as an opportunity for learning about different cultures while others think tourists as an annoyance to their daily lives.
### Table A.4 - The positive and negative aspects of tourism

<table>
<thead>
<tr>
<th>Aspect (Below)</th>
<th>Positive</th>
<th>Negative</th>
</tr>
</thead>
</table>
| Environment/Ecology | - Tourism fostering environmental conservation  
- Ecotourism | - Increasing sewage, solid waste, noise, habitat destruction, air pollution, changes in landscape |
| Economy | - Employment to locals  
- Increase in tax revenues  
- New Investments | - Breakdown of traditional industries  
- Poor pay/low skill jobs  
- Increase in local prices  
- Low status for locals  
- Lack of local control over the local economy |
| Education | - Learning from travelers (cultural education)  
- Learning from traveling (cultural tourism)  
- Increase awareness for local heritage  
- Tourism studies/training | - Limited insight into local conditions  
- Ignorance of multi-faceted nature of tourism  
- Lack of schools for increasing local population due to immigration |
| Culture | - Respect for local culture and customs  
- Interaction between different culture/mutual learning | - “Borrowing culture for a day”  
- Tourist arrogance  
- Social tension  
- Drugs, alcoholism, prostitution  
- Xenophobia |
| Gender | - Wider horizons for young educated women  
- More opportunities for local women | - Sex tourism  
- Child prostitution  
- Local women relegated to the “jobs at the bottom” |
| Health | - Rest and Recuperation  
- Family Interaction | - Poor sanitation  
- Poor food  
- Lack of basic hygiene  
- Import/export of diseases  
- Drugs and alcohol problems |
| Agriculture/Fishing | - Increase in the demand for local products | - Decrease in farming/fishing  
- Increase in land values and taxes |
| Property Rights | - Increase in local ownership  
- Increase in the value of property owned by locals | - Loss of local ownership  
- Land speculation  
- Conflicts over property rights |
| Future Expectations | - Sustainable tourism  
- Ethics for tourists | - Tourism overcrowding  
- Pollution  
- Unpleasant travel  
- “Move to next destination to be created” |

*Adapted from Lovel & Feuerstein, 1992.*
APPENDIX 4 - THE GOVERNMENT ROLE IN ENVIRONMENTAL PROTECTION

In tourism, there are two main justifications for government intervention through environmental planning and management: externalities and “the tragedy of the commons” (Roy & Tisdell, 1998). First, tourism development can impose a series of externalities to other activities and society. Although it is very hard to separate the environmental impact of tourism related activities from the impacts of other activities, tourism industry as a whole certainly has a set of negative and positive environmental externalities to the rest of society (Coccossis & Nijikamp, 1995). In terms of negative externalities, tourism competes for environmental resources (water, land, etc.) with other human uses, such as agriculture, industry and urban sprawl. If there is no good management of environmental resources, tourism activity can comprise the quantity and quality of these resources (see Table A.5). For example, resorts in Bali (Indonesia) and Goa (India) consumed significant part of the local water and electricity causing shortages of these resources for local population (Goodwin, 1995). In similar fashion, the use of natural resources on which tourism quality depends by other economic activities can cause deterioration of those resources and, consequently, affect tourism activity. In Italy, hundreds of historical monuments that are tourist attractions were damaged seriously by sulfur dioxide from nearby industries costing several tens of dollars to the Italian government to restore them (Jenner & Smith, 1992). In the Brazilian state of Ceara, the construction of a huge port in a zone with scenic beaches can compromise the growing regional development of the tourism industry (Vasconcelos & Silva, 1996).

On the other hand, tourism activities can also bring positive externalities to society. For example, infrastructure for tourism can be used for other purposes as well. Airports can be used by locals who want to travel. Roads can be used for transportation of local passengers, and agricultural or manufactured products. In Bahia, Brazil, the paving of the touristic road connecting the small town of Itacare to the larger town of Ilheus allowed the creation of new bus lines. Before the construction, Itacare had only few bus lines, which were interrupted after heavy rains, that limited the transportation options of the local population. The new road increased the access of the local population to Ilheus for shopping, recreation and medical emergencies. The creation of environmentally protected areas for tourism purposes can be used by locals for entertainment, work (fishermen who benefit from preservation of fishing habitats) and supply of environmental amenities (protection of water reservoirs). For example, the New York’s Adirondack State Park, besides protecting the natural environment, provides a forested watershed for the state’s water supply (Nash, 1978).

Second, the uncontrolled competition within the tourism industry over environmental resources (water, land, environmental amenities, etc.) can generate a kind of “tragedy of the commons,” which can harm the whole industry. The increase of tourism activities can

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124 Hardin (1968) used the term tragedy of the commons to describe the overgrazing of the common pastures in England during the eighteen century. Villagers could bring their cows to graze on the common pasture as much as they wanted at no cost. As the number of herders grew and they kept increasing the number cows grazing, the grass became scarce. In the end, overgrazing destroyed the common pastures and all cows died.

125 Information collected from interviews with municipal officials in Itacare in 1999.
generate a growing demand for certain touristic products. An increasing demand for scenic unexplored beach can generate a growing construction of hotels and houses in the sea side which can degenerate the primary environmental quality of the beach (the beaches ceases to be unexplored and scenic). In turn, this can also cause a series of environmental problems (e.g.; deforestation, air and water pollution, degeneration of the landscape), which can affect the whole tourism industry in a region. For example, Benidorm, a popular typical tourism spot in England, had had a sharp decline in tourist numbers in the end of the 1980s because visitors perceived it as crowded and not “green” (Goodwin, 1995). Thus, an uncontrolled growth of tourism in one region can undermine its tourism potential by damaging its environmental or cultural resources, if proper intervention is not in place.

The use of environmental resources in the tourism industry can affect regional economic activities, including tourism itself. If there is no rule or control for the use of environmental resources through well-established and enforced rules and property rights, the tourism activity can cause a series of environmental problems and end up in a “tragedy of the commons.” Thus, the sustainability of environmental resources for the tourism industry depends on how the different actors define and enforce rules for the public and collective use and conservation of these resources. Government interventions should try to assure minimum levels of negative externalities and maximum levels of positive externalities to society, as well as help to organize the different actors in the tourism sector to avoid the tragedy of the commons. Governments play these roles through environmental planning, regulation, and provision of infrastructure and financing.
<table>
<thead>
<tr>
<th>NATURAL ELEMENTS</th>
<th>Activities Related to Tourism</th>
<th>Possible Environmental Consequences</th>
</tr>
</thead>
</table>
| Water            | - release of sewage/garbage onto beaches, rivers, lagoons, lakes and subterranean aquifers  
|                  | - release of oil/garbage from recreational and transportation vehicles  
|                  | - land reclamation  
|                  | - health hazard to local people and tourists  
|                  | - destruction of aquatic life (animals and plants)  
|                  | - losses of aesthetic values  
|                  | - reduction of activities such as fishing and bathing  
| Air              | - increased air and noise pollution by transportation means  
|                  | - increased air and noise pollution by construction works  
|                  | - health hazard to local people and tourists  
|                  | - loss of recreational values  
|                  | - negative impact on plant and animal life  
| Wildlife         | - use of local trees for resort construction and firewood  
|                  | - increase in accidental/criminal fire in parks and forests  
|                  | - collection of wildlife for collection and souvenir industry  
|                  | - development of highway and trails through natural areas  
|                  | - chase away animals to view and photograph  
|                  | - decline in plant and animal species/numbers  
|                  | - increased soil erosion  
|                  | - changes in species composition  
|                  | - destruction of wildlife habitats  
|                  | - disturbance in migration patterns  
| ECOSYSTEMS       | Coastlines and Oceanic Islands  
|                  | - Construction of hotels, roads, campsites, parking lots, golf courses, harbors and other facilities  
|                  | - use of sand from dunes and beaches for construction  
|                  | - Land reclamation  
|                  | - Alteration of coastal land (sea walls, reefs, etc.)  
|                  | - elimination of aquatic and terrestrial wildlife habitats  
|                  | - interference with breeding habits  
|                  | - erosion of beaches and dunes  
|                  | - loss of aesthetic values on the landscape  
|                  | - alteration of drainage system and water run-off  
| HUMAN MADE ENVIRONMENT | Human settlements  
|                  | - follow up infrastructure: hotels, bars, restaurants, souvenir shops, houses for local population, roads  
|                  | - Immigration  
|                  | - displacement of people  
|                  | - traffic congestion and overloaded infrastructure  
|                  | - loss of amenity of residents  
|                  | - unpleasant architecture  
| Historic and Religious Monuments | - excessive use for tourist purposes  
|                  | - thefts and destruction of historical pieces  
|                  | - trampling and littering  
|                  | - alteration of original use and function in detriment of locals  
|                  | - desecration  

Adapted from O'Grandy (1990)
Government Strategies

Governments have realized the importance of adequate tourism planning in order to try to avoid environmental degradation (and consequently losses in the tourism activity). Government strategies for environmental policy and planning in tourism have been created in various forms, managed by different jurisdictions of government and had diverse interactions with civil society and external actors. Four strategies are the most typical responses of local and regional governments to cope with the environmental impacts of tourism development:

(i) **Building Institutional Capacity.** Governments create governmental environmental organizations, train and educate government officials in environmental issues, and enforce environmental regulations.

(ii) **Investments in Environmental Projects.** Governments invest in environmental infrastructure and institutional projects such as sanitation and water supply, environmental education to groups outside the government, and environmental restoration such as reforestation and pollution clean-ups.

(iii) **Control of Development and Tourist Flow.** Government can impose and enforce development rights, restrict public financing to certain environmentally sensitive areas and control the flow of tourists in protected areas.

(iv) **Creation of Protected Areas.** Governments are responsible for creating protected areas, for enforcing environmental zoning, and for providing incentives for private actions towards environmental protection.

Each of these strategies is further analyzed below.

**Building Institutional Capacity**

Some governments try to create or strengthen institutional capacity to respond to actual or potential environmental impacts of tourism. This is one of the main recommendations of tourism planning guidelines in any advisory document (OECD, 1980; CIDA, 1987; WTO & UNEP, 1992; Ceballos-Lascurain, 1996). Building institutional capacity could take several forms. Governments can create independent environmental agencies, such as ministries or secretariats, or create regulations to confront with the environmental issues that a particular government faces. Also, many times, building institutional capacity involves hiring of new people with environmental background or offering environmental training for actual officials.

External actors and governments have often supported this kind of policies. External actors, such as international donors and federal agencies, suggest the creation of environmental agencies at the local and regional level as a form of formal commitment to environmental protection (CIDA, 1987; WTO & IISD, 1993; EMBRATUR, 1995). Also, they can help these agencies with training and technical support. Governments endorse the creation of environmental agencies or divisions, first because they can keep environmental local matters under their control, and second because this is a form of visible environmental
attitude which please outsiders and locals. In Porto Seguro, Bahia, local government created a secretariat of environment to face the increasing environmental demands due to tourism activities in the last two decades and to receive tourism projects financed by the state government and the Interamerican Development Bank (IDB). Likewise, environmental divisions within sectoral agencies, such as secretariats of tourism or agriculture, have been instituted to cope with specific environmental issues in those sectors. In Bahia, Brazil, this has been a common approach in the last decade. Several sector secretariats, including the secretariat of culture and tourism, have created departments of environmental affairs to plan and implement their environmental policies and project.

*Investments in Environmental Projects*

Environmental projects are forms of mitigating current or potential environmental problems in tourism areas. They include sanitation and water supply infrastructure, urbanization and public environmental education. Environmental projects in tourism come as a response to critical environmental problems that can affect tourism activities in a certain area, such as water pollution, uncontrolled urbanization or lack of garbage collection. Some development-oriented conservationists have argued that tourism development can improve environmental quality because under certain conditions developers can invest heavily in water and sanitation projects to mitigate current and future environmental problems (Towle, 1973).

Many tourism areas that boomed without strong effort on environmental planning have suffered from severe environmental problems, and ultimately in decline of the number of tourists. Even those that went through a careful planning did not ensure a harmonious interaction between tourism development and the environment conservation (Bosselman, 1978). However, when the process of decline was detected or environmental movements within and outside the tourism industry made their voice listened, some governments in these areas invested in and implemented measures for improving environmental quality, such as introducing sewage systems, renovation projects and environmental education. Part of these areas were successful in improving environmental quality, and once more they could recover its normal flow of tourists, such as Mallorca in Spain (Llinás, 1996). Others faced deep decline and were victims of themselves, such as Acapulco and Jerusalem in Mexico (Bosselman, 1978). In addition to mitigating environmental impacts, environmental projects can be part of environmental safeguards to get tourism development projects approved or justified. In many big tourism projects, developers include an environmental component that can involve mitigation procedures of their impact, such as a sewage treatment plant, or procedures related to surrounding communities or environment, such as projects of environmental education for the neighboring communities (OECD, 1980; Leon & Gonzalez, 1995).

Many environmental projects can be made possible due to the existence of investments in the tourism sector. When investments are planned in certain economic sector, policy makers can allocate part of these investments to environmental measures. A number of research articles and campaigns among policy makers and developers has contributed for the growing attention to environmental issues (e.g., OECD, 1980), and policy makers and developers seem to be more permeable to environmental claims. Investments can come, for
example, as environmental projects linked to that economic sector or as financial support to governmental institutions in order to implement and enforce environmental guidelines. At planning stage, there is often a wider budget flexibility to attend the various demands from different groups in the process. New projects, therefore, are "windows of opportunities" to introduce environmental projects at planning stage. For example, the regional government of the Spanish island of Mallorca implemented public works to improve environmental amenities, such as tree planting and construction of beachfront public esplanade, to face opposition to a controversial marina project in their jurisdictions (Morgan, 1991). In Porto Seguro, Bahia, plans of investments in tourism by the state and municipal governments included several environmental projects, such as sanitation and water supply infrastructure. It has been the first time significant environmental projects are implemented in the municipality. These environmental projects would not be possible, politically or financially, without the whole bunch of investments in tourism infrastructure. Furthermore, during the planning process in the discussions with local groups, other environmental projects were included in the plans due to the flexibility in the budget allocation.

Control of Development and Tourist Flow

Another form governments attempt to manage environmental impacts of tourism is to control development and tourism flow in certain tourist areas. Controlling development consists of limiting development to low levels and demanding a rigorous screening process for project approval, including several environmental guidelines to be followed. There are several tools for implementing development control, such as introducing land use planning, issuing development permits, limiting the number of lodging to be constructed, and asking environmental impact assessment (EIA) and public hearings for certain projects. For example, some governments, such as Malta, have firmly applied restraints to new tourism infrastructure development in order to cope with natural resource scarcity like water (Goodwin, 1995).

Governments can also control the flow of tourists and length of stay in tourist areas. Limiting tourists’ access or charging entrance or permanence fees have been the main mechanisms to implement these policies. For example, many national parks in the United States limit the number of visitors in the high seasons by issuing a limited number of entrance tickets. This is due to the extremely high number of tourists willing to visit some of the parks. For example, the Greater Yellowstone National Park has received over 10 million tourists annually in some years (Glick, 1991).

However, some authors are skeptical about the feasibility of policies involving controlling development and tourism inflow in developing countries (Butler, 1991 and May, 1991). They argue that these kind of policies face strong opposition from local population and businesses in response to potential losses of revenues generated by tourism, as happened in some mountains regions in Asia (May, 1991). In Mallorca, Spain, local tourism industry opposed a government project to renovate a certain area with the construction of a marina which would require the demolition of various mass-market shops and hotels (Morgan, 1991). Especially in developing countries, the need to attract foreign investments and generate jobs

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126 Information from an interview with municipal officials.
and income makes those policies extremely difficult to be accepted and implemented (Tyler, 1989). For example, Albanian local and central governments opposed any initiative to restrain tourism development on the coast because of their need for foreign investments, even tough environmentalists pressured for and proposed more environmental control (Goodwin, 1995).

Two cases in Brazil have shown evidence that this kind of policies is feasible under certain circumstances, such as when government controls development are easily implemented and local interests support these policies. In both cases, local groups who benefit from tourism feared competition from outsiders and strongly supported controlling development. In Fernando de Noronha, state government owns all the land and allows only low impact projects to be build, under support of environmentalists and local groups. Also, because of the difficult access government has controlled the flow of tourist by limiting the number of flights to and boats in the islands, and controls the stay by applying a daily charge to tourist stay. In Icapuí, Ceará state, municipal government created a tourism council formed by local communities to evaluate and approve tourism projects. Projects should be authorized by large part of the communities. As most of the tourism businesses were local, large projects or development controlled by outsiders were difficult to be approved. Until recently, this council had approved only small local tourism projects controlled by locals.

Creating Environmentally Protected Areas

To cope with environmental impacts of tourism, many governments all over the world have created environmentally protected areas. These environmentally protected areas have constituted an attempt to discipline tourism development in areas where tourism has exposed fragile environments to stress or where recent vectors of development, such as an opening of a new road, expose remote and fragile zones to quick development. The rationale behind this approach is that; first, the creation of the environmentally protected area fulfills some of the environmental impact mitigation guidelines to approve or legitimate a certain tourism project; second, this is a marketing response to the need of a good environment as part of attracting tourists; and third, entrance or user fees to certain environmentally protected areas can be used to raise revenue to pay for maintenance and enforcement expenses (WTO & UNEP, 1992; Ceballos-Lascurain, 1996). In some countries, like Kenya, tourism in protected areas has become one of the main sources of foreign exchange (Olindo, 1991). However, protected areas can also be a source of conflicts or just not be enforced. For example, local population has not supported the establishment of Nelson’s Dockyard National Park in Antigua because of the fear in government’s control over private land (CIDA, 1987). Also, in many developing countries, protected areas “exist only on paper.” Barzetti (1993) found that large part of the protected areas in Latin America did not have any implementation mechanism after being officially declared.

Governments can also create protected areas to curb potential environmental degradation by big projects and to control ecosystem stress. In Icapuí and Fernando de Noronha in Northeastern Brazil, local governments created a protected area to impede the construction of a big resort in the place, under pressure from environmentalists and local groups who fear about being harmed by this project. In the state of Bahia, a new concept of
Environmentally Protected Areas (APAs) became the main environmental tool to control development in areas that received investments in tourism infrastructure in the last decade. Also, APA could be used as a marketing mechanism to attract a growing number of potential ecotourists. To attract these ecotourists, governments and industry invested in advertising their region as environmentally preserved areas and tried to divulge their achievements in the environmental area. Chapter 3 covers protected areas in detail.

**The Policymaking Process in Tourism Development and Environmental Protection**

Both the state and the private sector\(^{127}\) can play important roles in tourism development. The development of tourism requires the implementation of several activities, such as promotion, supply of basic infrastructure (e.g., road and utilities), financial mechanisms, environmental regulations and services (e.g. transportation, hotels and restaurants). The division of the roles between the state and the market vary from country to country and according to the country’s political, economic and social conditions over time. In some countries, tourism is almost completely in the hands of the state. For instance, in Cuba and some of the former republics in the Soviet Union, such as Uzbekistan, governments run almost everything from tourism promotion to management of hotels (Airey & Shackley, 1998; Honey, 1999). In other countries, such as the Seychelles, some services, such as hotels, are provided by both the state and the private sector (Gabbay & Gosh, 1998). However, in most countries, the state commonly holds the primarily responsibilities for promoting tourism, providing economic incentives, building infrastructure, and working on environmental planning and management (Britton, 1991; Ioannides, 1995).

Within governments, responsibilities regarding tourism development vary from case to case. In general, governments (countries, states or cities) have an agency to organize and promote tourism for their jurisdiction. But tourism interests often run in several departments or agencies, including agencies for tourism promotion, transportation, the environment and financing. For example, in the United States, the federal government has the US Travel and Tourism Administration (USTTA) in charge of tourism promotion, and the states and cities have their respective agencies for tourism (McIntosh & Goeldner, 1990). However, several other agencies have their responsibilities regarding tourism development, such as, at the federal level, the Federal Aviation Administration, the Department of Transportation, the National Park Service, the Forest Service and Office of Management and Budget. Because of the broad range of activities related to tourism, there are several conflicts among government agencies involved in tourism development. Agencies can compete for budgetary allocations or disagree about the impacts of tourism project.

Some of the roles of the public sector in disciplining tourism development can be conflicting. On the one hand, governments have a developmental role. Governments should attend private demand for investments in infrastructure and public utilities (in many countries, like Brazil, some public utilities belong to governmental sphere). Particularly in developing countries, governments are major players in tourism development through the provision of marketing, regulations, training of labor force and infrastructure projects (Wall, 1997), including roads, airports, electrification and telecommunication projects. These projects can

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\(^{127}\)In private sector, I include all non-governmental institutions, such as community groups, firms and NGOs.
cause a series of direct and indirect environmental problems. On the other hand, government agencies have to create and enforce rules for the use of environmental resources through mechanisms of environmental planning and management such as land use regulations, rules for licensing projects and regulations for the conservation of fauna and flora. This environmental role can often conflict with the developmental role.

As mentioned above the private sector and the state play different roles in tourism development according to the country or region where it takes place. In most developed countries, decisions about tourism development are mostly dependent on the private sector (Wall, 1997). Central governments only influence peripheral matters like tourism promotion and regulation on airline flights and visas. The private sector has to deal mostly with issues that are generally in the hands of local governments such as zoning systems, development permits and environmental regulations that may apply locally.

In developing countries, however, government’s influence in tourism development generally is much greater (Wall, 1997). Besides promotion and regulation, governments often play a major role as investors in public infrastructure, promoters of training and sources of financial incentives. To attract national and international private investments in tourism, governments in developing countries have to come up with plans to assure the security of these investments. Thus, plans are designed to promote tourism development, often with the assistance of private consultants and with the interference of external actors responsible for part of the financing. In addition, because of the raise of the environmental movement and pressure from local and external actors, some governments have opened the process of discussing environmental issues among different stakeholders in the public and private sphere. This has allowed groups inside and outside the government, ranging from local groups to international institutions, to introduce their values and interests in the policy process. For example, in Costa Rica, which has embraced nature based tourism as a priority for economic development, central government involved tour operators, local population and environmental groups in its tourism plans (Boo, 1990).

In the development process, many of the conflicts described in Table A.4 come to light. Different groups interested in tourism development stress different concerns. The case of tourism development in the Brazilian Northeast can illustrate the facts described above. Groups keenly diverge about the social and environmental effects of tourism development in the northeastern region. This debate became evident in the 1990s when the federal and state governments planned to invest more than 1 billion dollars in infrastructure for tourism in the region, with financial support from the Inter-American Development Bank (IDB) channeled through the Bank of the Northeast (BN). On the one hand, developers and part of the state and local governments supported the activity saying that it would generate a lot of jobs with little investment and it would not degrade the environment. On the other hand, some NGOs, local communities and some groups within the governments argued that tourism, in the way it had been developed (based on big hotels and infrastructure projects), could degrade the environment both aesthetically and physically and cause social problems (e.g., projects displace locals from their properties and traditional jobs to serve the tourist industry in low

\[^{128}\text{It is common to hear from them that "tourism is a smokeless industry."}\]
paying jobs and illegal activities, such as prostitution and drug dealing). In another example, in Albania, government and international donors proposed plans that would open some unspoiled beaches off the Adriatic and Ionian seas for tourism development. While central governments supported these plans arguing that tourism would bring economic development, environmentalists viewed tourism as a threat to the environment. Instead, they proposed projects that would be unlikely to be profitable (Goodwin, 1995). Thus, because of these different views, it is often very hard to reach a wide consensus in tourism planning about the desirable environmental/social impacts of the tourism activity. The increasing complexity of the relations between tourism development and its environmental and social consequences open rooms for the involvement of different agencies in the central government, local interests, developers, environmental groups, social NGOs, international donors and the media.

Local Pressure

Environmental interests have grown in many developing countries. They include community groups, environmental NGOs and even more environmentally conscious groups inside the government (Viola, 1992). These groups have been responsible for introducing a series of new values in society and in the policymaking process. Particularly, NGOs have been essential in diffusing environmental values and strengthening environmental interests in many countries (Paehlke, 1994). They have campaigned against projects that can potentially affect the environment and for the diffusion of knowledge about the costs and benefits of preserving the environment. These campaigns have convinced many people in civil society, including some in the government, about the importance of the environment. Furthermore, they have been legitimated as representatives of civil society in some policy and planning processes, such as environmental impact assessments and environmental councils. Also, many environmentalists can later work for governmental organizations, contributing for the introduction of their environmental ideas in these organizations.

For the adoption of environmental safeguards in the process of tourism development, these groups, often using alliances with external actors, make political pressure on policy makers. Groups that support more determined environmental policies can request different forms of measures, such as more investments in environmental projects, investments in environmental agencies to implement weakly enforced regulations or the creation of new tools for environmental management. They can use all kinds of means to express their concerns such as protests, messages through the media, campaigns for the electorate, judicial processes and letters to the financing institutions. For example, in Fernando de Noronha, Brazil, local community groups, local environmentalists and groups within the federal environmental agency pressured the government to create a national park in the islands. This objective was threatened by the desire of big hotel chains that had plans to construct resorts in the islands. In the end, the media coverage supporting environmental groups, the coalition with national scientific groups and the fully support of local population resulted in the creation of the park.

129 Since 1970s, besides the National Environmental Council (CONAMA), several state and municipal environmental councils have been created. They are responsible for defining local and state environmental policies.

130 From interviews with officials in the Fernando de Noronha government authority in Recife, July 1998.
**External Pressure**

External pressure on environmental policymakers at the local and regional levels can come from some financing institutions such as the federal government, the World Bank or the IDB (Inter-American Development Bank), or even from some international NGOs (Dwivedi & Vajpeyi, 1995). Governments at lower level can be extremely dependent on public investments from public institutions at the upper levels. Therefore, they can be susceptible to all kinds of external pressures from upper level governments, including changes in their environmental practices, in order to receive public and private investments in tourism development.

Starting in the 1960s, there was a rising public concern about threats to the environment that were harming wildlife and human health in developed countries. The growth of environmental movements made significant pressures not only in the way public and private developers in the industrialized nations took into account the environment in their policies and plans, but they have also changed environmental values in society in general. For example, due to this public pressure, in the United States, many governments were eager to respond by creating new institutions, such as the Environmental Protection Agency (EPA), and by introducing environmental regulations, such as the Clean Air Act. As developed countries shifted from industrial to post-industrial societies, public concerns moved to value quality of life issues such as environmental quality. Environmental values were part of the spread of postmaterialist values, which also includes human rights, of the “silent revolution” started in the 1960s (Paehlke, 1994). The silent revolution significantly changed governmental practices towards the environment (Kraft & Vig, 1994). Nowadays, environmental values have definitively settled as one of the institutions that shape policy decision-making in societies in industrialized countries. In the 1980s, these values were introduced in some international development organizations (like the World Bank and the United Nation Development Program – UNDP), especially as result of the pressure from governments and NGOs of industrialized countries to make them include environmental analyses in their projects and to hire specialized personnel (Wade, 1997). Donors, especially the World Bank, suffered rush criticism from projects that caused environmental destruction by northern NGOs. For example, the World Bank was accused of stimulating environmental degradation in the Polonoroeste Project in the Brazilian Amazon in the 1980s (Rich, 1985; Lutzenberger, 1985). Due to these criticisms, the Bank made several environmental reforms in 1987.

Today, international development organizations have tried to influence development agents in developing countries to introduce environmental procedures in their plans and policies and to adopt environmental values by divulging the benefits of environmental preservation and by stimulating the presence of environmental groups in the planning process (World Bank, 1992). Donors have increasingly interfered on national and local environmental policy processes to make governments in developing countries change their attitude towards environmental issues. For example, donors, especially the World Bank and

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131 In Brazil, for example, 56% of public revenues are retained by the federal government, 28% by state governments and 16% by municipal governments (Souza, 1996). However, some governments in poor zones, especially in the Northeast, possibly receive much less than 16%.
IDB, were important actors to spur changes in environmental technology in the Mexican electric power sector (Norberg-Bohm, 1995). Donors can affect local environmental policies in two ways: By conditioning loans to the adoption of certain environmental measures or by using loans to open a policy dialogue with borrowers thus being able to introduce policy changes steadily (Fairman & Ross, 1996). In the first way, donors lend to borrowers that have adopted certain environmental measures or condition loans to the borrowers’ promise of creating and implementing environmental measures. In the second way, donors use loans to influence local policy decisions in order to try to introduce their environmental concerns.

Donors have conditioned loans in the tourism sector to environmental guidelines and to the reservation of part of the budget to environmental projects. Donors have increasingly worried about their image and the legitimacy of their actions in order to avoid accusations of being responsible for widespread environmental destruction as in the 1970s and 1980s (Dwivedi & Vajpeyi, 1995). For instance, the World Bank created a tourism department to finance US$ 450 million in tourism projects in 1969. Due to increasing criticism from non-governmental organizations regarding the impacts of those projects on communities and on the environment this department was shut down and the tourism program discontinued (McLaren, 1998). Changes have been made in the World Bank, but environmental groups have questioned the environmental effectiveness of some projects. Even recently, some critics argued that ecotourism projects under the Global Environmental Facility (GEF) bypassed less cooperative local groups and provoked environmental degradation (McLaren, 1998).

Brazilian federal government can also condition federal projects and loans in tourism development on the adoption of environmental measures. First, the federal government tries to improve its image internationally, since it had been accused of environmental destruction, especially in the Amazon, by environmental NGOs and members of the international community for a long time (Lutzenberger, 1985; Mahar, 1989). Second, federal financing institutions are under scrutiny of the international donors and NGOs in order to invest in environmental protection, since they receive part of the financial resources from these international institutions. These pressures are often imposed on state and municipal governments when these receive loans from the federal government.

For example, two regional tools were recently strengthened to manage environmental issues related to tourism in the Bahia: the creation of Environmentally Protected Areas (APAs) and the implementation of the Coastal Management Program (CMP). These tools were created as alternative mechanisms for environmental protection to possibly guarantee the financial support for tourism development from the financial institutions (IDB and BN). Their implementation was intensified in the same period as tourism development received large sums of the government funds. APAs and the CMP were introduced by different

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132 In the last few years, the Brazilian Ministry of Environment have coordinated the Coast Management Program (CMP), a huge effort to map, zone and monitor the development of all activities on the Brazilian coast, including tourism, industry and urban settlements. This effort is implemented by state environmental agencies with financial and technical support from the Ministry. Part of the financial resources comes from World Bank loans. Most of the states in the Northeast have received funds and advanced in the implementation of the CMP after large investments in tourism were announced.
institutional mechanisms in the agenda of the environmental agencies. However, both of them were influenced by the appearance of potential investments in tourism development. The creation of APAs appeared as the result of the pressure from groups within the government and financial institutions (BN and IDB). In many states, especially in the states of Bahia, Ceará and Pernambuco, Environmentally Protected Areas (APAs) have been created and demarcated in areas with potential for tourism development. CMP has been implemented as a long-time initiative from the federal government, through the leadership of the Brazilian Ministry of Environment. Although CMP is not recent, states accelerated its implementation and received financial resources after the federal government announced huge investments to foment tourism development.
APPENDIX 5 – LEGISLATION ON ENVIRONMENTALLY PROTECTED AREAS (APAS) IN BRAZIL

There are three pieces of federal legislation regulating the creation and administration of APAs (Governo do Estado da Bahia, 1998):

The Federal Law Number 6,902 of April 27, 1981
The National Environmental Council’s Resolution Number 10, December 14, 1988
The Federal Decree Number 99,274 of June 6, 1990

The relevant parts of these three legislation bodies are translated below.

Federal Law Number 6,902 of April 27, 1981
The President acknowledges the National Congress decree, and I sanction the following law:

Article 9 – According to the principles that establish property rights, the public power will define rules limiting the following activities within any Environmentally Protected Area (APA):

- the establishment or operation of any industries that could pollute waterstreams or reservoirs;
- land clearing or the opening of canals or ditches whenever they potentially cause any significant change in the local ecological conditions;
- activities that may cause erosion or an accentuated siltation of waterstreams; and
- activities that threaten any endangered species within any APA.

Paragraph 1 – The Federal Environmental Agency (IBAMA) or the equivalent agency at the state level – together, unilaterally or under agreement with other institutions – will be in charge of the enforcement of APA guidelines.

Paragraph 2 – The disregard for the rules stated in this article will subject the responsible agents to the attachment of their activities, to a legal action to expropriate tools and machines used in their activities and to the payment of daily fines ranging from Cr$ 200.00 (two hundred cruzeiros) and Cr$ 2,000.00. Fines will be readjusted to an inflation index (ORTNs) when they occur through long periods.
Paragraph 3 – IBAMA, or other public institution, will be in charge of applying the sanctions described in the previous paragraph. If fines are applied, the amount should constitute revenues to the federal or state government.

Paragraph 4 – The fines in this law are regulated by the rules in the legislation for tributes and for fiscal administration.

Article 10 - This resolution starts to be enforced at the date of its publication.

Article 11 – Any dispositions contradicting this law are revoked.

Joao Figueiredo
Mario David Andreazza

Conama’s Resolution Number 10, December 14, 1988

The National Environmental Council (Conama) decides the following based on its attributions stated in the eighth article of the law number 6,938 of August 31, 1981 and the seventh article in the federal decree number 88,351 of June 1, 1983:

Article 1 – Environmentally Protected Areas (APAs) are conservation units for protecting and conserving the environmental quality and the existent ecosystem, aiming at the improvement of the quality of life of the local population and the protection of the regional ecosystems;

Article 2 – In order to achieve the above objectives, APAs need a ecological-economic zoning.

Sole Paragraph – The referred zoning will establish rules according to the biotic, geological, urban, agricultural, extractivist, cultural and other conditions.

Article 3 - Regardless of the system of ownership, any area could be part of an APA.

Paragraph 1 – Any other conservation unit or other areas under especial environmental protection administered by the public power in the limit of the APA will be considered zones for special uses.

133 Law that states the Brazilian environmental policy.
Paragraph 2 – Regarding the anthropic activities going on in the zones for special uses, the APA will have supplemental objectives in order to ensure the achievements of the objectives of the law number 6,902/81\(^{134}\).

Article 4 – All APAs should have zones for the preservation of wildlife protection, in which the use of the natural systems will be regulated or forbidden.

Paragraph 1 – Within APAs, public or private Ecological Reserves, defined in the Federal decree number 89336 of January 31 of 1984, and other areas with equivalent legal protection will be considered zones for the preservation of wildlife protection. In these areas, any anthropic activities that change the biota will be prohibited.

Paragraph 2 – Zones for the conservation of wildlife protection will be those areas where a long and self-sustaining use of the biota is permitted; this use should be regulated in order to ensure the conservation of the natural ecosystems.

Article 5 – Any agricultural activities within APAs will be under zones for agricultural use where any activity causing potential environmental degradation will be prohibited or regulated.

Paragraph 1 – Under this resolution, chemicals and other environmentally degrading biocides that produce risks to human health will not be allowed in the zones for agricultural use. The Federal Environmental Agency (IBAMA) will determine which kind of chemicals will be allowed in the APAs.

Paragraph 2 – Agricultural methods will follow the soil conservation practices determined by the official agriculture extension institutions.

Paragraph 3 – Overgrazing methods will be prohibited within any APA.

Article 6 – Land clearing, mining, dredging and excavating activities that cause harm to the environment or endanger people and the biota will not be allowed in any APA.

\(^{134}\) Law that creates and defines APAs.
Any of the above mentioned activity will need the approval of an environmental impact statement and special license by the APA administrator if they are occurring within 1,000 meters from caves, streams, waterfalls, natural monuments, geological monuments and similar situations.

Any industrial activity that potentially pollutes the environment will need an special license from the APA administrator, besides the environmental permit stated in the law number 6,938 of August 31, 1981.

Any urbanization project within any APA will need the license from the APA administrator, who will demand the following items:

- compatibility with the ecological-economic zoning in place,
- implementation of a system for sewage collection and treatment,
- a system of public roads, whenever possible, with adequate design and rainwater sewer,
- land plots sufficiently large to have trees planted on 20% of the surface,
- a program for tree planting using native species, and
- commercialized land plots and roads only in areas with less than 10% declivity.

Rural settlements must be previously approved by the National Institute for Agrarian Reform (Incra) and the APA administrator.

The APA administrator can ask that the legal reserve for the preservation of the native forest for all land plots be concentrated in one single area under a cooperative formed by all the landowners.

The enforcement of the APA guidelines can be performed under an agreement between the APA administrator and non-governmental organizations, which should be able to collaborate, and be technically fit and financially credible for the tasks involved.

This resolution starts to be enforced at the date of its publication

Fernando Cesar Mesquita
Joao Alves Filho

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Rural properties in areas covered by native forest should leave a certain percentage (varying according to the kind of ecosystem) of the native forest under a “legal reserve” registered in the land registration office and the environmental protection agency (IBAMA).
Federal Decree Number 99,274 of June 6, 1990

The President… decrees:

...................

Chapter II – On Environmentally Protected Areas (APAs)

Article 28 – At the federal level, the Secretary for the Environment is in charge of proposing to the President the establishment of Environmentally Protected Areas (APAs) based on the assessment of the Federal Environmental Agency (IBAMA).

Article 29 – The decree creating an APA will determine its name, geographical limits, main objectives and the restrictions over the use of the natural resources.

Article 30 – The APA administrator will assist landowners in order to achieve the objectives of the APA.

Sole Paragraph – Landowners affected by the APA can mention the APA name in their properties in the promotion of tourism activities and on the label of products obtained from the APA.

Article 31 – Any relevant conservation initiatives within the APA will be praised publicly.

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APPENDIX 6 – EXAMPLE OF LEGISLATION CREATING AN APA

In general, a state APA is created by a short state decree issued by the governor. Later, a resolution from the State Environmental Council (CEPRAM) legally backs the guidelines in the management plan. This resolution is the longest piece of legislation for the legal backing of an APA (it can run over several pages), containing the description of all the zones and the environmental guidelines for land use, and all the responsibilities for the enforcement of APA guidelines. In addition, municipal laws can legally complement the establishment of an APA in order to provide municipal institutional support to the enforcement of the APA guidelines. For example, Itacare is backed by four pieces of legislation:

- the state decree number 2,186/93
- the state environmental council’s resolution number 1,334/96
- the municipal law number 175/97 of the municipality of Uruguca
- the municipal law number 118/97 of the municipality of Itacare

As an example, the state decree for Itacare APA is described below.

State Decree Number 2,186 of June 7, 1993

Creates the Environmentally Protected Area of Coast of Itacare/Serra Grande (Itacare APA) in the municipalities of Itacare and Uruguca, and provides other determinations.

According to the attributions determined in the law number 3,858 of November 3, 1980 and based on the federal law number 6,902 of April 27, 1981 and the Conama’s resolution number 10 of December 14, 1988,

Because of the importance for environmental preservation of the rocky cliffs, the pieces of Atlantic Forest, the coastal plains and other important ecosystems existent in the coastal zone between the delta of the Contas River and Sergi Creek in the municipalities of Itacare and Uruguca,

Because the region at stake presents scenic natural characteristics that permit the development of ecological tourism compatible with the conditions for sustainable development of the region, and
Because APAs constitute the most suited form of conservation unit available for the management of the social, economic and human activities in the area at stake, according to the actual legislation,

the Governor of the State of Bahia decrees:

Article 1 – The creation of the Itacare APA in the municipalities of Itacare and Uruçuca limited by Contas River in the north, Sergi Creek in the south (the administrative limit between the municipalities of Uruçuca and Ilheus), the Atlantic Ocean in the east and a line 6km away from the high tide line westward.

Article 2 – The Bahia Tourism Authority (Bahiatursa)\textsuperscript{136} will be in charge of the administration of the APA. Bahiatursa will have the following responsibilities based on proper legislation and the Conama’s resolution number 10 of December 14, 1998:

I – Develop a management plan within 18 months, taking into account the legislation, autonomy and peculiarities in the referred municipalities,

II – Analyze and issue technical assessments for the license of developments in the area, and

III – Exercise supervision over the activities within the APA, taking into account municipal jurisdiction.

Article 3 – Property rights within Itacare APA are restricted under the conditions stated in the federal law number 6, 902 of April 27, 1981.

Article 4 – This decree starts to be enforced at the day of its publication. Any dispositions contradicting this decree are revoked.

Antonio Carlos Magalhaes (Governor)
Waldeck Vieira Ornelas (State Secretary for Planning, Science and Technology)
Paulo Ganen Souto (State Secretary of Tourism, Culture and Commerce).

\textsuperscript{136} The administration was changed later to the State Secretariat of Culture and Tourism (Sectur).
APPENDIX 7 - TOURISM IN THE BRAZILIAN NORTHEAST AND IN BAHIA

Tourism decision-making in the Northeast, and in Brazil in general, is handled by different structures at the local, state and federal levels. At the federal level, coordination of tourism development is mainly managed by the Brazilian Institute of Tourism (EMBRATUR).137 Basically, EMBRATUR determines the main policies and sets mechanisms for promotion and financing of tourism all over Brazil. At the state level, different structures exist. Some states have a secretariat of tourism. In others, tourism is under a secretariat with diverse functions (e.g., in Bahia, there is the Secretariat of Culture and Tourism). Also, there are independent agencies for tourism development formed by a public-private partnership at the state level (e.g., Bahiatursa in Bahia). These state institutions promote tourism and coordinate state actions concerning the financing and locating private investment and public investments in tourism (infrastructure and marketing). At the municipal level, public structures for tourism development have appeared in the last decades in similar forms of those existed at the state level. Some municipalities have secretariat of tourism or put tourism with other activities (e.g., Icapui in Ceará created a secretariat of tourism and the environment, and Porto Seguro in Bahia has a secretariat of tourism). Besides public agencies, there are developers, entrepeneurs, employees' unions and NGOs who interfere in the system of decision-making in tourism. In the last decade, there have been created many tourism councils at the state, regional or municipal level to define tourism regional policies. These councils are formed by representatives from the government, employees unions, business people, developers and NGOs (e.g., in Porto Seguro region, which include three municipalities, there is a tourism council to coordinate state and municipal actions concerning tourism promotion and investments). More recently, tourism coordination and decision-making has involved actors in the environmental and cultural arena such as environmental NGOs, government secretariats for the environment and culture and cultural associations. Also, international organizations, such as international donors and NGOs, have increasingly influenced the process of tourism and environmental decision-making.

However, only recently, the importance of the “industry” of tourism has sharply called attention in the Northeast of Brazil (Rodrigues, 1996). Although this region has an enormous potential for tourism development, especially on its coastal areas, this activity was not a priority for government action. In the efforts to draw the Northeast out of economic backwardness, through bringing industries to the region using economic incentives, the focus had always been on the “real” industries, such as chemicals, metal-mechanics, textiles and food processing (Soares & Rocha, 1994; and SUDENE & BN, 1988). This “low” status of the economic potential of tourism in the past was not a characteristic of the Brazilian Northeast solely. Researchers and practitioners of economic development had tardily realized and given attention to tourism as a tool for regional economic development (Ioannides, 1995).

Nowadays, however, tourism is said to be one of the fastest growing economic activities in the world (U.S. Department of Commerce, quoted by Filion et al., 1994). In

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137 EMBRATUR is an agency under the Ministry of Industry, Commerce and Tourism.
Brazil, tourism has represented an important part of the Brazilian economy. It provided 4.7% of exports revenue between 1987 and 1990. In 1990, the participation of tourism was even greater than that of traditional products, such as orange juice and coffee (Becker, B. 1995). Domestic tourism also represents a significant economic activity. In 1986, approximately 42 million trips occurred within Brazil for tourist purposes (Becker, B. 1995). Construction of lodges had grown steadily, despite the slowdown of the Brazilian economy in the 1980s and 1990s (see Table A.6). Moreover, as the middle class has grown and road access has improved, ownership of second houses becomes common among many urban Brazilians, increasing the pressure on the environment.\textsuperscript{138}

Furthermore, planners in Brazil suggested that there was still a tremendous growth potential for tourism activity, especially international tourism, as Brazil attracted only 0.24% of the total worldwide number of international tourists in 1990 (EMBRATUR, 1992). Authorities in the Brazilian Northeast believed that tourism is expected to become the most important economic activity in the 21st century (Banco do Nordeste, 1997; p. 12). In this context, tourism had increasingly come to be a key economic activity for the economy of the Northeast. This region possesses a significant potential for the development of tourism: warm climate year round, cultural diversity and over 2.5 thousand kilometers of seashore with attractive beaches. In this context, policy makers believe that tourism can impel the regional economy, attracting investments, creating jobs and generating income to diminish poverty (Paiva, 1989; Banco do Nordeste, 1997).

\textit{Table A.6 - Number of rooms classified by The Brazilian Institute of Tourism (EMBRATUR)}

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ceará State</td>
<td>1,884</td>
<td>3,151</td>
<td>67.3%</td>
</tr>
<tr>
<td>Pernambuco State</td>
<td>3,092</td>
<td>5,687</td>
<td>84.0%</td>
</tr>
<tr>
<td>Bahia State</td>
<td>5,111</td>
<td>7,338</td>
<td>43.6%</td>
</tr>
<tr>
<td>Northeastern Region</td>
<td>14,429</td>
<td>24,498</td>
<td>69.8%</td>
</tr>
<tr>
<td>Brazil</td>
<td>99,854</td>
<td>140,563</td>
<td>40.8%</td>
</tr>
</tbody>
</table>


The belief that tourism can increase its importance in the economy of the Northeast had been translated into the amount of investments in the tourism sector. Between 1980 and 1990, the private sector received financing of over US$ 350 million for projects related to tourism (Melo & Souza, 1996). In the public sector, over US$ 1.5 billion is planned to be invested in infrastructure projects in ten years through a government sponsored program

\textsuperscript{138} The number of second houses in Brazil has grown from 350 thousands in 1980 to 562 thousands in 1996 according to the Brazilian Association of Sanitary Engineering (Veja, 1999).
called Prodetur-NE created in 1991 (Ministry of Economy, Treasury and Planning; Bank of The Northeast (BNB) and InterAmerican Development Bank (IDB), 1992). This plan is coordinated by the Bank of the Northeast (BN, Banco do Nordeste) and state governments with loans from Inter-American Development Bank – IDB. As a result of all these investments, tourism had grown faster in the Northeast compared to the Brazilian average growth (Table A.6).

Tourism has become an important economic activity in Bahia (Gottschall, 1994; Bahia State Government, 1997). Authorities in Bahia expect that as many as 78 thousands lodging beds be created on the coast by the private sector in the following decade (Bahia State Government, 1997). Tourism in some regions outside the state capital (Salvador) grew tremendously (Table A.7). For example, in the southern part of the state, Porto Seguro grew as one of the main tourist destinations in Brazil. In 1995, it was the fifth in Brazil and second in the Northeast in number of hotel beds (Governo da Bahia, 1997); and some analysts preview that Porto Seguro would surpass Salvador in number of hotel beds by the end of last decade (Table A.8, Mello e Silva, 1996). The growth in tourist demand had been so intense that the capacity of Porto Seguro’s airport had to be increased, only three years after it had been expanded in 1993.

**Table A.7 - Hosting capacity in the different coastal zones in Bahia**

<table>
<thead>
<tr>
<th>Region</th>
<th>Number of Beds in 1980</th>
<th>Number of Beds in 1993</th>
<th>Annual Growth Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salvador Metropolitan Region</td>
<td>9,600</td>
<td>15,170</td>
<td>4.46</td>
</tr>
<tr>
<td>Northern Coast</td>
<td>800</td>
<td>5,760</td>
<td>47.69</td>
</tr>
<tr>
<td>Southern Coast</td>
<td>3,300</td>
<td>29,929</td>
<td>62.07</td>
</tr>
</tbody>
</table>

*Source: Bahia State Government (n.d.)*

**Table A.8 - Number of Hotel Beds in Salvador and Porto Seguro in Bahia (1995)**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Salvador</td>
<td>8,165</td>
<td>10,285</td>
<td>26.0%</td>
</tr>
<tr>
<td>Porto Seguro</td>
<td>2,897</td>
<td>9,184</td>
<td>217.0%</td>
</tr>
</tbody>
</table>

Within tourism, ecotourism has probably grown even faster. In number of tourists from industrialized countries who visit Latin America, between 50% and 79% are potential ecotourists (Boo, 1990). In Brazil, it does not look different. In Porto Seguro, Bahia, natural attractions were quoted as the main purpose of the trip by 84% of the tourists in a survey (Bahiatursa, 1997). Also, government authorities emphasize the importance of preservation of the environment in official documents in order to attract ecotourism investments and ecotourists (Bahia State Government, 1997).

Therefore, ecotourism can create one more economic justification for biodiversity conservation and preservation of natural areas. In some cases, financial resources from ecotourism (taxes or entrance fees) can even be a form of increasing the budget for paying the costs of creating and maintaining public services for environmental protection. This is important especially for developing countries where budgets for environmental management are very tight (or non-existent). However, ecotourism per se does not mean tourism without environmental impacts. Ecotourists need the same sort of tourism infrastructure as other kind of tourists, such as lodging, road access and telecommunication services (Filion, 1994). Governments need to control and prevent these impacts through environmental management initiatives. Thus, nowadays, it is common to find governments in developing countries dedicating part of their investments in the tourism sector to environmental protection.