

**University of KwaZulu-Natal
Centre for Environment and Development**

**Application of a Framework to Assess Wildlife Policy and its
Implementation in Moçambique**

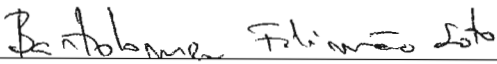
**Submitted in fulfillment of requirement for the degree of Master of Science at the
University of KwaZulu-Natal**

Bartolomeu Soto
January 2004

PREFACE

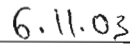
The work described herein was undertaken in the Centre for Environment and Development, University of KwaZulu-Natal, Pietermaritzburg, under the supervision of Professor CM Breen of the Centre for Environment and Development, Pietermaritzburg.

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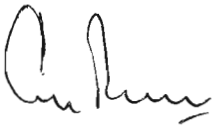


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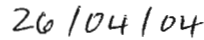


Date



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Professor CM Breen



Date

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ABSTRACT

Wildlife management in Moçambique has had a troubled history. The end of civil war and installment of a democratic Government provided opportunity to redefine policy and implementation of conservation. Weakened by civil strife and with wildlife decimated in many areas, Government sought approaches to conservation that would promote participation by investors and civil society, particularly rural communities. The intention is to acknowledge the rights of rural people to resources and the benefits that can accrue from their use. Partnerships are seen as a way in which Government can bring the required financial and human resources to bear whilst at the same time engendering positive attitudes to conservation in general, and to policy in particular.

The purpose of this research is to examine, using two case study conservation areas, the consequences of Government's attempts to implement its policy. The philosophical basis for the research is that policy reform and implementation should be envisaged as a complex system comprising many interactions and that when this complexity is not acknowledged and addressed systemically, it predisposes the process of policy reform and implementation to failure. A principal cause of failure is considered to be that assumptions are not made explicit and this results in development and application of an approach that does not accord with reality. Further, because of the networked nature of the system, failure at one point can be magnified as its consequences are propagated through the system.

A conceptual framework for policy reform and implementation is developed. This exposes some critical assumptions about Government's capacity to implement policy and the ways in which implementation is experienced by stakeholders, especially local communities. Context is provided by tracing the evolution of approaches to conservation in Moçambique from the pre-colonial era to the present. The findings are that Government does not have the capacity to implement its conservation policy and this is shown to have serious implications for how local people perceive and respond to Government approaches to conservation. Causal factors are analysed and assessed. It is concluded that the process of policy reform and implementation is complex but that a systems approach provides a simple and easily comprehended way in which this complexity can be interpreted and taken into account with potentially very significant benefits.

Perceptions are shown to be a powerful determinant of response to policy reform and implementation. As these are commonly a basis for destructive tensions between parties, it is suggested that research directed at defining the principles that should underpin management of perceptions and tensions should be encouraged.

Acronyms

AMRU (Portuguese)	Association of the Rural Women
CBFW	Community Based Forest and Wildlife
CBNRM	Community Based Natural Resources Management
CPI (Portuguese)	Centre for Promotion of Investments
DNFFB(Portuguese)	National Directorate of Forest and Wildlife
DNRS (Portuguese)	National Directorate of Wilderness Resources
GEF	Global Environmental Facility
INE (Portuguese)	National Institute of Statistics
MAP(Portuguese)	Ministry of Agriculture and Fisheries
MICTUR (Portuguese)	Ministry of Trade, Industry and Tourism
NGO	Non Governmental Organisation
ORAM (Portuguese)	Rural Organization of Mutual Help
PROAGRI (Portuguese)	Program for the Agriculture Sector
SODETUR(Portuguese)	Tourism Development Company
SPFFB (Portuguese)	Provincial Services of Forest and Wildlife
TFCA	Transfrontier Conservation Area

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Chapter 1

Introduction

1. 1. Introduction

Policies are formal or informal tools that are used for decision-making. In this way conservation activities are guided by policies that determine who has access rights over resources in a specific area and what kinds of uses are allowed within that area.

It is known that societies have long been engaged in the modification of nature: extracting, producing, processing and trading a diversity of products from a broad spectrum of natural environments (Zerner, 1999). Over time, there have been changes in patterns of use of natural resources which has forced the authorities to frequent adaptation in regulating such uses.

Recently, environmentalists have sought to fashion and to implement a new family of environmentalisms based on the markets, commodity flows and incentives (Zerner, 1999). This is an indication that policy design and implementation is continually adapting to the pressures and demands over the natural resources and offers an opportunity to track the on going imposed changes.

Natural resources policies have become more inclusive in addressing the stakeholders concerns. Approaches should attempt to establish equitable partnerships so that all stakeholders have an equal opportunity to control manage and benefit from indigenous wildlife. Stakeholders are given the chance to take part in joint analysis, development of action plans and implementation. As a result, the stakeholders priorities are incorporated into management strategies which will ensure that the sense of ownership is propagated and there is a strong internal motivation to contribute to sustainable use of natural resources (IIED, 1994).

The nowadays challenge is to combine development and conservation (e.g. meeting the needs of communities through increasing the benefits and income from the sustainable use of resources) guided by appropriately formulated policies and legislations. Important areas of focus relevant to policy development in regard to natural resources are community participation, economic benefits, tourism, and private sector involvement and wildlife management and ownership of resources (IIED, 1994).

1.2. Natural resources ownership that guides the policy

The policy of access to natural resources is highly influenced by the constitutional statements of countries, which dictates where the ownership of natural resources is placed. According to Barbier (1992) four types of resource ownership and management regimes can be recognized in policies of the developing world:

- Private ownership - resources ownership is conferred on a private individual or group of individuals;

- Common property ownership - is ownership and management of resources by a reasonably defined community. Often communities will jointly own grazing land, forest, woodlots and even farmland;
- State ownership - resource ownership is vested in the government, which also determines and controls resource rights and use. Officially protected areas and many other natural resources such as forests, mines coastal seas and even wild animals, are often subject to state ownership in developing countries; and
- Open access - resources are freely accessible to any party wishing to use them.

Common property ownership may be difficult to differentiate from state ownership of resources. Often, it is translated as grant from the government of *de jure* recognition of local management autonomy for some rights and responsibilities.

Community Based Natural Resource Management (CBNRM) programs implemented in most Southern African countries are based in the common property type of resource ownership. According to Hitchcock (cited by Margoluis, 2001) many times this approach does not give full ownership of resources to communities as governments still with authority, interfere in aspects such as setting take off quotas and retaining control over funding involved with the management of resources. As a result communities some times see this interference as abrogation of their fundamental rights to use the resources.

1.3. Community participation in policy design and implementation

According to Scoones and Thompson (1994, cited in Allister, 1999), participatory processes in management of natural resources can provide an opportunity for less powerful groups (local communities) to contest existing power relations and resources rights. They equally provide a forum for more powerful or politically aware groups to further legitimate status quo wealth and power relations or to assert preferential rights over resources in the name of “community interests”. However, Motteux (2001) recognizes that work in community-based programs has uncovered themes that can frustrate and may even prevent sustainability, such as the following:

- **Participation** which opens access to development decision-making and policy for groups not previously included (Ford, 1996);
- **Accountability** which increases use of transparent and public methods for data analysis decision making, and monitoring;
- **Partnership** which stimulates dialogue and agreements between and among previously distant or isolated development units (e.g. government planners and community groups);
- **Ownership** of local information, project activity, and productive resources which

promotes higher levels of responsibility among local resource users and managers (Ford, 1996); and

- **Participatory monitoring** refers to the systematic and continuous process of assessing the progress and changes caused by the implementation of an activity over a certain period of time, usually using pre-determined indicators or recurrent questions (Guijt, 1998).

The emerging paradigm for conservation is complex. Not surprisingly perhaps, progress has not been smooth. Indeed, some would argue that current people oriented approaches to protecting the world's biologically richest areas are failing miserably (Wilshusen et al., 2002). Notwithstanding this, (Brechin et al., 2002), conclude that the most feasible and socially just alternative for long-term success is for the conservation community to work constructively with people at all levels as difficult and imperfect as that may be!

There can be little doubt that social justice will increasingly be reflected in the practice of conservation, particularly in developing countries where there is a need to strengthen the moral foundation for environmental protection. Since independence and more particularly since the cessation of war, the Moçambique government has set a goal that seeks to entrench conservation protections that are socially, just and morally defensible. This research assesses progress in two areas, Maputo Elephant Reserve and Chimanimani Conservation Area.

Chapter 2

The Research Problem

2.1. Changing paradigms

Historically wildlife policy and legislation throughout east and southern Africa addressed the conservation of wildlife with a concern for cultural, scientific and recreational purposes only and so with few, if any, exceptions such policies and legislation resulted in protectionist wildlife management (Rudge, Hurst & Niger, 1997). Adherence to protection and strict controls on hunting meant that control and management of wildlife resources, along with associated revenue collection and expenditure, was being retained by the central government agencies (Child, 1995).

Though perhaps appropriate at the time and possibly relevant for some countries, it became increasingly apparent that wildlife policy and legislation were losing validity in the face of changing economic and social circumstances. Particularly, it was found that existing wildlife management policy in many countries was failing to stop the dramatic decline of wildlife (Cumming et al., 1990; NRI, 1997). Furthermore, wildlife policy did little to overcome problems such as:

- conflict and competition between wildlife and other forms of land use;
- wildlife, particularly outside protected areas being treated as a common property resource by communities without any authority, or responsibility for it;
- no incentive to conserve habitats for wildlife outside protected areas; and
- limited means of revenue generation.

Thus according to Rudge, Hurst & Niger (1997) policies in many countries led to:

- local communities being disenfranchised and removed from ownership, responsibility and authority for the resource, even outside of protected areas;
- centralised revenue collection from many benefits being generated by wildlife, and the failure to use such revenue to support development in the rural communities commonly affected by the wildlife resource;
- the failure to fully develop the potential of wildlife tourism because of the concentration of tourists in national parks. This occurred with an inequity in distribution of tourist revenue, and lack of mechanisms for revenue generation in private and communal lands; and
- the removal of wildlife from the "market place" and therefore from potential private sector investment. Additionally, without a realistic economic market value, wildlife became perceived to be a competitor for rapidly diminishing resources such as grazing, water and land.

Responding to these problems and policy failures by the 1980's a number of countries in Africa had begun to revise their wildlife policies and legislation in order to link conservation to rural income generation and rural development (Rudge, Hurst & Nigier, 1997).

2.2. Forest and wildlife policy design and implementation in Moçambique

Moçambique obtained its independence in 1975, but the country experienced a civil war between 1977 and 1992. The war was responsible for the destruction of the country's economy, and much of the wildlife. Estimates of wildlife resources in 1976, indicated a stock of about 30 000 elephants, 200 000 Buffaloes, 35 000 Zebra and 70 000 Waterbuck among others (DNFFB, 1991). The aerial survey conducted in 1990 in Marromeu Special Buffalo Reserve had revealed that the numbers of wildlife declined 80% by 1997. Similar reductions were suspected to have happened throughout the country (DNFFB, 1996). According to the 1999 Draft Strategy for Elephant Conservation in Moçambique, in 1999 Moçambique was estimated to have about 18 000 elephants. The end of war has opened accesses to new areas for hunters of wildlife, mainly non-protected areas in which government had low capacity to control. This resulted in increased pressure on the resources accelerating the decline of wildlife (DNFFB 1996). Currently government still does not have control of these areas and is concentrating its efforts in protected areas and areas where community based natural resources management programs are taking place.

Poverty reduction is the government's main development goal and will have to be based to a large extent, on agriculture and rural development. To achieve this goal Moçambique has to rely on the potential of its rich natural resource base that represents one of countries most valuable assets and an important source of livelihood for most Moçambicans (World Bank, 1996). Nature based tourism is perceived to be a principal mechanism for realising the value of these assets and the World Bank, among others, has been supporting the Ministry of Tourism with development of Transfrontier Conservation Areas and incorporation of conservation into tourism policies and strategies

After the war, the Government of Moçambique made its first post colonial review of the forest and wildlife policy in 1996. The Forest and Wildlife Policy (1996) which is part of the Agriculture Policy (1994), *inter alia* recognizes a role for forest and wildlife in alleviating poverty in the rural areas through active participation of stakeholders such as private sector and local communities¹, in the management of forest and wildlife (DNFFB, 1996). This has also been done as part of the government's effort to integrate stakeholders particularly local communities and the private sector throughout the country, in the rehabilitation² and management of forest and wildlife resources.

¹ Local communities under the Land Law (1997) are defined as a group of families and individuals at a locality, of lower level, including the residential sites and agricultural fields, whether they are being tilled or fallow, forests, places of cultural importance, pastures, water fountains and areas of expansion

² Almost all wildlife-protected areas were abandoned and vandalised during the protracted civil war in the country, and now the Government is rehabilitating and re-stocking them with some of the depleted large mammals.

In Moçambique the principle is that ownership of natural resources is vested in the state. However, the forest and wildlife policy intends to devolve rights of use and responsibilities on resources management to stakeholders.

2.3. The Moçambique Transfrontier Conservation Areas Project

One of the instruments through which the Government is promulgating its forest and wildlife policy is the Trans-frontier Conservation Areas (TFCA) project. The TFCA project aims to rehabilitate protected areas located along the border of Moçambique and neighbouring countries, as well as to promote collaboration and co-operation on habitat and wildlife management among the countries. The project also aims to promote in Moçambique, multiple land uses in areas adjoining protected areas thorough participating in development planning for those areas. The project is funded by the Global Environmental Facility (GEF) through the World Bank and has been implemented since 1997 in three pilot areas that border neighbouring countries. These are South Africa bordering with Maputo Province, South Africa and Zimbabwe bordering with Gaza Province, and Manica Province bordering with Zimbabwe (Figure 1.1).

Under the TFCA project strategies for community participation have been developed as part of the overall guidelines for the rehabilitation and management of the forest and wildlife in the TFCAs. This has been done on the understanding that local communities have available expertise and a range of skills which, if harnessed appropriately, can assist in establishing sustainable regimes for the improved management of forest and wildlife resources. A principle adopted was that the private sector has the necessary financial resources and skills and accepts the principles of community participation in management of resources.

The implementation of TFCA project has led to agreements for four TFCAs: Great Limpopo; Lubombo; Zimoza and Chinmanimani. With regard to communities of Chimanimani, the TFCA project developed a Management Plan that proposed establishment of the Nakaedo Biosphere Reserve, with a core conservation zone covering highlands above 1000 metres above the sea level (asl) and an outer zone including land lower than 1000 asl, with boundaries are defined by the river systems in the area. As no provision is made in Mozambique for designation of Biosphere Reserves, the area was declared as Chimanimani National Reserve in 2003 by Government. The core conservation area was designated as the area for strict conservation and the outer zone was designated as a multiple use buffer zone in which resource use is defined by an a management plan agreed with government.

In Chimanimani the TFCA project also identified income-generating activities such bee keeping, aquaculture and mushroom collections demarcated community land and facilitated declaration of 18 historic cultural zones. These are protected areas under the full responsibility of community and are generally used for traditional rituals, ceremonies, etc. (TFCA, 2003).

In Maputo Elephant Reserve the TFCA project developed a draft management plan in 1997. This was not implemented as in 1999 the government awarded a concession to a private company called Blanchard SODETUR (see Chapter 5) to undertake the development of the Reserve and surrounding areas. The concession was cancelled in 2000 due to low performance.

During the Blanchard Sodeteur concession an electric fence (20 km long) was erected along the Futi River with objective of minimising conflicts between elephants and local communities. The fence had the effect of preventing access of communities to the water and fertile soils of the Futi River (Maputo Special Reserve Report 2000).

2.4. The Conceptual Framework for Policy Review (Fig.2.1.)

Policy revision is a process through which current understanding and wisdom can be incorporated to shape principles and practices to build accord with the desires of society (Hoekstra, 1995). Policy, in the context of this research, is an expression of the principles which society wishes should guide and regulate the management of wildlife. In this paradigm it is incongruent that the policy should be formulated without participation of society. This understanding of policy revision as an interactive process enables us to analyse the process and construct a mental model (Senge 1990). Such a mental model has also been referred to as a conceptual framework since it conceptualises the process that is presently understood in a structured and systematic manner. Senge (1990) explains that one of the principal benefits of developing a mental model is that it encourages us to explore implicit assumptions. By making such assumptions explicit in the construct of the mental model, they can be tested for validity and rejected should they prove invalid. Another important issue is that once the assumptions are made explicit in the conceptual framework, they are less likely to be overlooked during the implementation of the process. One important value of establishing a framework for policy revision is therefore that it serves to guide the process so that steps considered essential are not omitted. Should they be omitted the validity of the assumption underpinning the steps can be evaluated.

The framework in Fig. 2.1 illustrates both the forces driving policy reform and the manner in which revision of policy and regulations occur. Interaction between availability of resources, the needs and desires of stakeholders to use the resources (A) determines the types and magnitudes of pressures on resources (B). These determine the state of the resource system (B1) and this in turn determines the perceptions society has of the state of the resource system (E). The pressures (B) on and the state of the resource system (B1), together with the perceptions society have (E) determine government perceptions (C) and the willingness to review policy and legislation (D) so that it regulates the process (B) in ways that direct the state of system of resources (B1) to accord with societies perceptions of a desirable state.

Government is responsible for formulating policy and legislation, and it is therefore required to implement them. In this way policy and legislation create a requirement for implementing capacity in government (D and E). The extent to which government is able

to give effect to its policy and legislation influences the perceptions society has of government (F). In general terms, success may be measured by both acceptability of policy and implementation (G, H and I). These direct the stakeholder's willingness to collaborate with the government (J, K and L).

This conceptual framework has been used to direct the research presented here in regard to policy design and implementation in Moçambique. The situation in Moçambique is that policy has been reviewed to promote a community based natural resources management approach to resources management. The framework allows definition of the development process of the policy and permits its structured evaluation. Three elements of the framework were selected:

- Policy was reviewed to provide context for the study and to elucidate how and why the present policy was established;
- Government capacity to implement its own policy and legislation is assessed because the assumption is that if it cannot do this, then the policy and legislation fail to regulate use (pressures) and the state of the resource system changes, probably degrading. This alienates government from its constituency; and
- Stakeholders perceptions are assessed in two TFCAs because this shapes willingness to collaborate and therefore determines the success or failure of policy.

This analysis is used to formulate recommendations for further research

2.5. Research Purpose

The thesis aims to test a theoretical framework for policy formulation and implementation *vis a vis* the process followed by the Government of Moçambique. It considers formulation and implementation the policy for forest and wildlife in regard to wildlife resources governance.

International trends in natural resource management particularly at regional level, that take into account people's needs by consulting and involving them in decision making and enabling them to derive benefits from conservation have originated new approaches to conservation. In the Communal Areas Management Programme for Indigenous Resources (CAMPFIRE) pioneered in Zimbabwe, the wildlife authority has devolved authority over wildlife utilization to Regional Councils, enabling them to gain a direct income from conservation but retention of control by government has contributed to CAMPFIRE not achieving its intentions to the extent that may have been hoped for. In Zambia the Administrative Management Design (ADMADE) that rests on the formation of village management committees was established to entrench involvement of local people in planning of wildlife utilization; in receiving income through the sale of concession fees; and in sustainable use of wildlife by local villages (Mwenya et al, 1990 in Jones, 1995).

These trends caused Moçambique to review its policies and promote partnerships involving the state, the private sector and local communities. In doing so, however, it did not take cognizance of the impact of civil war on its capacity (human and financial) to develop and implement such policies in the participatory manner that is assumed in the framework (Fig. 2.1) to be necessary for securing support from civil society. These inadequacies are anticipated to be reflected in the post war economy, institutional organization, staffing and management of processes as directed at building partnerships and working with local communities to secure their participation.

2.6 Structure of the Thesis

The framework (Fig. 2.1) makes explicit the assumption that there is a relationship between the capacity of government (financial and human), its practice of implementation, and the perceptions of the society. The argument made in this thesis is that had this been made explicit at the start, the government might have adopted a much more pragmatic, less idealistic, approach. Because this assumption was not explicit, government was poorly prepared for the task it set itself and an inevitable consequence would be a disillusioned public. This then, forms the hypothesis directing the research.

Chapter two develops the research problem in the context of changing paradigms in relation to wildlife protection and management and develops a conceptual framework for in this study. Chapter three describes the methods used for the research and describes the study area. The Chapter four addresses the policy for wildlife management in Moçambique, illustrating the evolution of policy and legislation in Moçambique, particularly focusing on three distinct periods (pre-colonial, colonial, post-colonial and post-civil eras). Chapter five focuses on contemporary policy and legislation interpreting the processes and implications, particularly for Government's capacity to implement policy. Institutional organisation and capacity, the extent to which the private sector is investing in the Moçambican forest and wildlife sector, and how the existing policies and legislation facilitate private sector involvement in forest and wildlife management are also reviewed. Chapter six considers the rural communities perceptions of the extant wildlife policy and legislation with respect to their rights *vis à vis* access to and participation in forest and wildlife management resources and how these resources can enhance rural development in Moçambique. Chapter seven evaluates the usefulness of the conceptual framework in the research, and comments on the validity of the assumptions. The assessment is used to draw conclusions and formulate recommendations for further research.

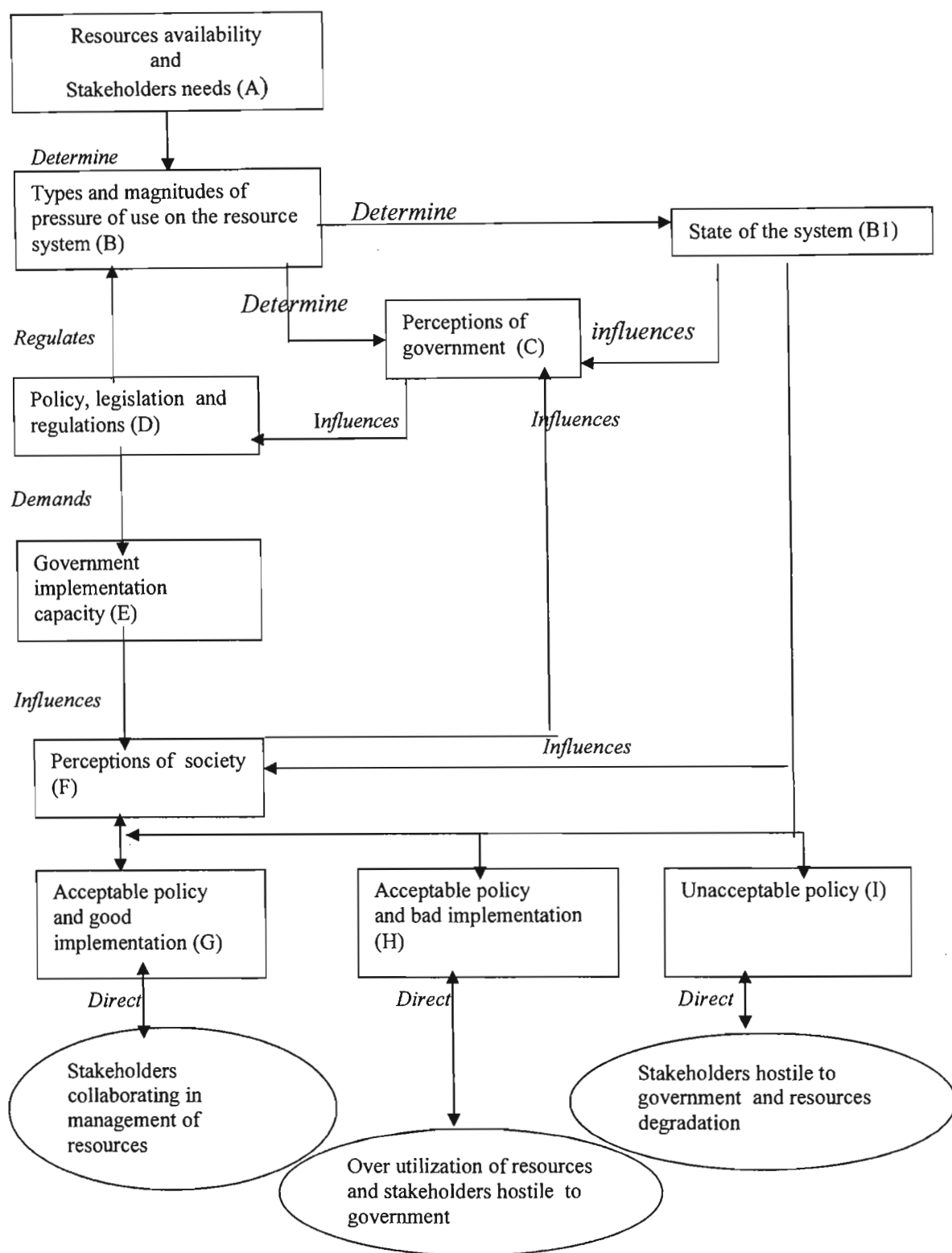


Figure 2.1 A conceptual framework illustrating the processes that are driving policy formulation and implementation, and effectiveness of policy as an instrument promoting collaboration in management of use of resources. This framework establishes context for understanding how the process of policy formulation may or may not be contributing to stakeholder in Moçambique Adapted from (INR, 1998)

Chapter 3

Research Methods and Study Areas

3.1. Introduction

This research was structured by the conceptual framework which was developed using the approaches to systems thinking espoused by Senge (1990) and policy analysis by Hoekstra (1995). The study was centered in policy analysis. Literature pertinent to natural resources and more specifically wildlife policy in the region with particular focus policies in relation to TFCA was reviewed. It also included the design of a questionnaire that was used to interview community members of two TFCAs, namely the Lubombo TFCA (Maputo Elephant Reserve) and Chimanimani TFCA. The two sites were identified on the assumption that there are socio-economics differences that influence needs, use or resources and perceptions, yet they are subject to the same policy. The questionnaire was designed to find out how the local communities of the Maputo Elephant Reserve within the Lubombo TFCA and of Chimanimani Conservation Area within the Chimanimani TFCA perceived the new forest and wildlife policy and their participation in management of wildlife resources.

3.2. Literature review

The literature review centered on the evolution of principles and policies of natural resources and CBNRM. Attention also focused on the roles of stakeholders, and on the institutional capacity of DNFFB.

The evolution and implementation of Moçambique's policy of forest and wildlife was traced particularly in respect of the TFCA project. Information was obtained from available publications and Government reports on the Maputo Elephant Reserve and Chimanimani reports were also investigated. Government reports and documents relating to partnerships in management of wildlife resources elsewhere in the country such as Niassa and Tchuma tchato, were also considered. This allowed an evaluation of the "*status quo*" of policy implementation. Knowledge so gained was used to develop the questionnaire which sought to determine the perceptions local communities have of implementation of the policy for forest and wildlife.

3.3. Questionnaire for the study

The study used an interview-administered questionnaire. It included both structured (respondents have to select one answer from fixed choices) and open-ended questions (Siegel & Castellan, 1998). Due to the focus on perceptions, which may be imprecisely conceived and formulated, it was particularly important to permit the respondents to give extensive responses to a series of general questions (Martin, 1995). The open-ended questions were used to enhance interpretation of responses to most of the structured questions.

The communities were selected to reflect differing situations on three gradients, namely the socio-economic, natural resources and management gradients. These are considered to profoundly influence supply and demand of natural resources and how uses are regulated and balanced (Breen, Personal Comm. 1998). The questionnaire was structured to provide information on three gradients: the socio economic gradient, which included issues such as the age, locality of birth, area of living, profession, number of children, level of education and the cultural significance of wildlife resources for people; the natural resources gradient included issues pertinent to perceptions of abundance of the resources, and the levels and types of utilization; the management gradient, where questions focused on policy and legislation awareness, local community organizations and their capacity to manage the use of natural resources.

The questionnaire solicited information on the communities' perceptions of the key issues of the forest and wildlife policy and legislation in regard to community's rights and provision of access to the benefits accruing from use of the resources. Specifically the questionnaire invoked responses on:

- Information about the level of education and profession;
- Community rights;
- Participation in the policy development process;
- Awareness about various Government's policy and legislation initiatives;
- Involvement in natural resources management and use;
- Support for regulations; and
- Local capacity for natural resource management.

The author developed the questionnaire in English. Then the author translated it into Portuguese, so that assistants would be able to use it in the field. Due to the low level of proficiency of Portuguese by the respondents, most of the questions had to be asked in local languages and the answers translated into Portuguese. These translations were done by the author but as assistants gained understanding, they administered the questionnaire independently. The local languages are Shangana, for the case of Maputo Elephant Reserve and in Chimanimani Shona is mostly spoken although some people speak Chimanyica. The responses recorded in Portuguese were translated into English by the author, and then analyzed.

The fact that the questions and responses were translated, brings with it a risk of obtaining incorrect information, either due to wrong translation of the question or by wrong translation of the answer. Probing answers to check and confirm responses minimized this. Nevertheless caution was required in interpretation.

Communities are reported to be suspicious of motives if they have been involved in many participation processes with no obvious results (Goyder 1998 and Found 1997, in Allister, 1999). The conduct of interviews in the two research areas followed specific preparatory activities taking into account the reality of the areas (Martin, 1995). In both areas the representatives of the local communities were first approached, and requested to allow the conduct of interviews in their area. It was explained to them that the interviews

were part of a research project, and that the results would contribute to the development of the policy of forest and wildlife, and they should not expect immediate or direct benefits. For the case of Maputo Elephant Reserve the community members have been subjected to research questionnaires quite often. Not surprisingly therefore the author experienced some difficulties. The leader of Mavukuza community was not willing to cooperate at first and it was only after clarification and discussion that permission was granted, and the people felt free to collaborate in the research.

The author conducted eight individual interviews and a further two group interviews with the communities of Liundi, Gala and Mavukuza (Fig.3.1.). The respondents were conveniently sampled (Steward & Shamdosani, 1990) and included 30 men and 12 women, of which one man was the traditional Chief.

In this type of research it is necessary to be good listeners and speak with the people in ways that allow them to freely express their ideas and opinions (Martin, 1995). Local people may be reluctant to express their interest, may give “correct” or “expected” responses, or may present needs which they feel fit the agenda of researchers. Their responses are often based on perceptions of what they can gain or lose by providing certain information, as well as suspicions about how the results will be used (Mosse, 1994, in Allister, 1999). To ensure meaningful data collection, for both Maputo and Chimanimani, local technicians with whom the local people are familiar, were trained and used to facilitate the interactions, and conduct the interviews, and to give respondents confidence and opportunity to express themselves freely.

In Maputo, the author trained two field staff officers who had the required education to conduct the interviews. One had completed secondary school. This education meets the basic requirements to be a candidate for a diploma course in schools such as the Southern Africa Wildlife College of South Africa, and the College for Wildlife Management of Mweka (Tanzania). The second had a university degree. They conducted fifty-two interviews. The author also conducted the interview with Chief Mavukuza at his home. The interviews were conducted from July to September 1999. It should be noted that this was conducted after termination of the Blanchard concession (see Chapter 4), which created unfulfilled expectations.

For Chimanimani the interviews were conducted in the communities of Tsetsera located in between Muoha and Rotanda, Zomba in Dombe, Nhaedzi and Mahati in Rotunda (Fig 3.2.). The interviews were conducted by the author (10) and by the three field officers (50) that were previously trained, by the author. Two of the field officers had a secondary school level and one a diploma in agriculture. The author also conducted a group interview, with the Nhaedzi community, where the respondents comprised thirty women and forty-three men.

The author first approached the leaders of the community and explained the purpose of the interviews, which was to evaluate the perceptions of the people regarding the policy of forestry and wildlife. Leaders were requested to convene a meeting with community members. During that meeting the purpose of the research was explained and questions were

responded to. The community members used that meeting to also express their concerns regarding management issues e.g. In Maputo the people were concerned about the raiding of their crops by the elephants. The explanation was beneficial, as the participants were made aware of the importance of their cooperation for the interview. Participants at the meeting were interviewed during the following days at their homesteads.

All the people conducting the interviews, namely the author and the field staff trained by him were government officers. Use of government personnel can contribute to distortion in responses because some respondents may be fearful of providing information to government authorities as it could work against them. To minimize this, the author selected research assistants of whom he had firm information that they had established good terms with local communities. Perceptions of interviews were that respondents were open in discussions of management of natural resources and related issues. Nevertheless, caution should be applied in interpretation of the responses.

Respondents were conveniently selected to reflect a representative cross-section of the community (Steward & Shamdasami, 1990; Martin, 1995). In the process, however, respondents were limited to adults (according to Moçambican law, an adult is any person over 18 years old) because they would most likely be the ones making decisions about harvesting and use of natural resources, and hence they would be most affected by the state of the resource and by implementation of the policy. Although it would be desirable to have men and women equally reflected in the sample, the reality is that in traditional households the head, usually a man, would have to be approached in the interview. This meant that samples included mainly men who are the head of household. Use of women to conduct interviews might have led to a more even representation of women in the sample. This was, however, not possible with the staff available. Homesteads of people are dispersed. The interviewer started from a specific point and walked to the next house and did the interview. If the house did not have any adult at the time for interview it was excluded and the interviewer did not return to the homestead. A total of 60 respondents were interviewed at each research site, namely Maputo and Chimanimani.

3.4. Data Analysis

It was not the intention of this research to quantify in any precise manner, the perceptions of local communities. This is because of the many confounding factors for example consequence of civil war, resettlement subsequent to the war, unfulfilled expectations from various development projects and samples in which household heads men predominate. Rather, it was the intention to establish if there were generally held perceptions (conceptual framework Fig. 2.1) that would result in supportive behavior for the existing policy, or if for Government should modify either or both its policy and/or its implementation.

Figure 3.1. The Moçambique Transfrontier Conservation Areas



Source: Ministry of Tourism (2003)

Data regarding professions of interviewee, gender composition, local of birth, level of education, perception on resources base, policy awareness local communities organizations were all grouped and summed by response category (Siegel & Castellan, 1988).

The analysis of data was conducted in the context of the conceptual framework, which enabled to evaluation of the opportunities and obstacles of the policy of forest and wildlife and its implementation, which was the base to extract the conclusions and recommendations (Quivy & Campenhoudt, 1995).

3.5. Selection and description of study sites

This research focuses on TFCAs because they have high profile in the Government, reflecting their international character, donor interest, size and incorporation of pre-existing national parks and game management areas. Two TFCAs were selected. These were the Lubombo Transfrontier Conservation Area and the Chimanimani Transfrontier Conservation Area. Within the Lubombo Transfrontier Conservation Area the study site selected was the Maputo Elephant Reserve because of its socio-economy and management has strong urban influences reflecting its proximity (80 Km) to main city center of Moçambique, Maputo. It also has a very variable resource base both physically (land, rivers, sea) and biologically as part of Maputaland Center of Biodiversity (IUCN, 1996). By contrast, the Chimanimani TFCA has a socio-economy and management reflecting its isolation both spatially as it's nearest town, which is smaller than Maputo, is 100 km away, and physiographically being in a mountain area straddling the divide between Moçambique and Zimbabwe. The resource base is less varied than in the Maputo Elephant Reserve.

3.5.1. The Maputo Elephant Reserve

Location and infrastructure

The Maputo Elephant Reserve is an integral part of the Lubombo Transfrontier Conservation Area (Fig.3.2). The Lubombo TFCA is located in the Matutuine district and includes the Futi Corridor which links with Tembe and Ndumo Game Reserves in Kwazulu Natal, South Africa (World Bank, 1996). Maputo is located about 80 km to the north.

The roads system is poor. There is one road from Maputo to Ponta de Ouro and it passes through the Reserve Gate. The road is only suitable for four-wheel drive vehicles.

Regarding the communication system, the Maputo Elephant Reserve has a radio system, that allows communication within the Reserve and with the Maputo City. The nearest telephone is at Bela Vista Town that is located 20 Km from the Maputo Elephant Reserve, and there is no cellular phone reception.

Demography

The total estimated human population within the Maputo Elephant Reserve is about 2000. Due to the rich resources particularly fish in the inland lakes of Piti and Xingute, people from several parts of Moçambique moved into the villages and are exploiting the fish resources for commercial purposes, and even engage in trans-border trade with the neighboring communities in South Africa. Besides fishing, the communities practice small-scale agriculture on fields (average of 0,5 hectare) and grow mainly sugar cane, maize, beans, pumpkins and cassava (IUCN 1996). They also brew sugar cane spirit and keep chickens, mainly for domestic and limited commercial uses.

Land and resources tenure

Under the forest and wildlife law, the Maputo Elephant Reserve, is a proclaimed protected area belonging to the State.

The Maputo Elephant Reserve was formally established in 1932, as a Coutada³ by the Portuguese colonialists, who used the area mainly for recreation and trophy hunting. A year later it was upgraded to a Reserve status. The land proclaimed as a Reserve was alienated from the Tsonga people. However, due to the high demand for land for other activities such as agriculture and livestock, and conflicts with local people, the east side of the Reserve was deproclaimed in 1940. Subsequently the Reserve was subjected to numerous boundary alterations due to conflicts with local communities and competing land uses (IUCN, 1996).

The conflicts between local communities and the existence of the Reserve on their ancestral land, continued even after Moçambique attained independence from the Portuguese colonialists in 1975 (Oglethorpe et al., 1997a). This led to the decision by the Government in 1980, to remove everybody living within the Reserve by force, and most of the evicted people settled in Massoane and west of the Maputo River, where floods killed several people that settled close to the River (Oglethorpe et al., 1997a)

Chief Mavukuza, the leader of the evicted people, never agreed with the Government action and hence he went back and resettled in the interior of the Reserve. When the war between the Government and RENAMO affected the Reserve, both the government authorities in the Reserve and local people abandoned it and sought refuge in the city and towns. Some fled to South Africa. After the war and signing of the Peace Accord of 1992, local people returned to their ancestral land, and in some cases within the Reserve. The communities of Gala, Liundi and Mavukuza villages returned to their ancestral land within the Reserve.

Biophysical features

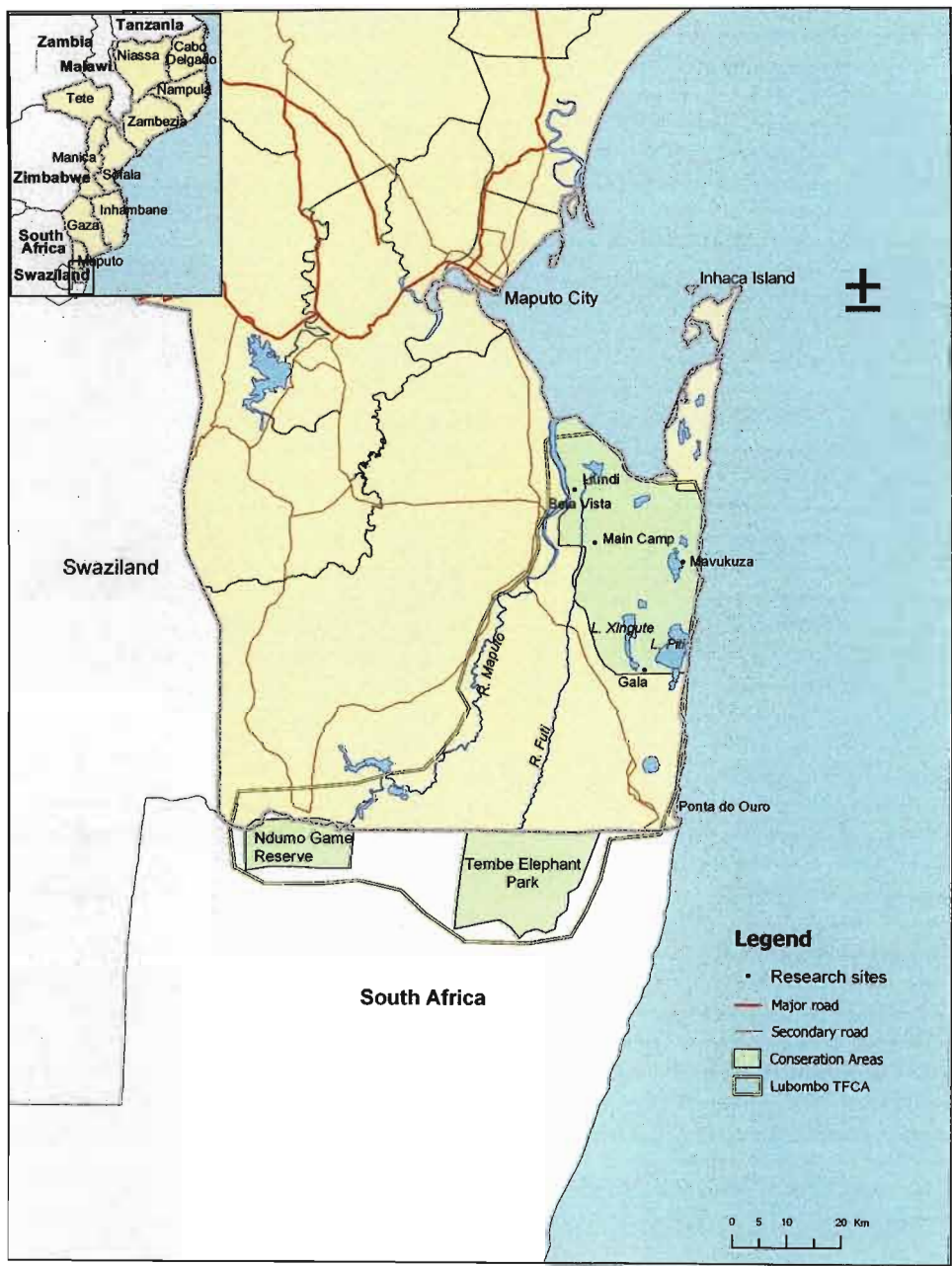
The area is characterized by a high species diversity of endemic flora, and it forms part of the Maputaland Center for Higher Plant Diversity (Hutton 1995; Oglethorpe et al., 1997b).

³ Wildlife hunting area

Besides this, the area has numerous sensitive ecosystems, such as coastal forest, the Futi valley and the mangroves. Overall, the Lubombo TFCA is located in one of Moçambique's prime areas for eco-tourism development because of its natural beauty and exceptional combination of terrestrial, riverine, lacustrine, beach and marine ecosystems. This complex biophysical system extends southwards into South Africa where extensive areas have been incorporated into the Greater St Lucia Wetland Park.

The existence of local communities in the Maputo Elephant Reserve poses a management challenge, most particularly as the local communities dependence on the Reserve's natural resources and the Government's conservation objectives have not yet been fully reconciled. The effectiveness of the various enabling frameworks for local communities to participate in, and tangibly benefit from eco-tourism development and management of the rich biodiversity in the Reserve and adjacent areas has not yet been assessed. This study is the first to attempt to determine the communities' perceptions of Government's efforts in trying to involve them in protected area natural resource management in the Lubombo TFCA.

Figure 3.2 The Maputo Elephant Reserve



Source: Ministry of Tourism (2003)

3.5.2. Chimanimani

Location and infrastructure

The Moçambique section of the Chimanimani TFCA is located in Sussundenga district of Manica Province (Fig. 3.3), bordering the Republic of Zimbabwe. The Sussundenga district comprises four localities (Postos Administrativos) namely the Headquarters at Sussundenga, Dombe, Muoha and Rotunda. The area is situated at about 100 km from Chimoio, the capital city of the Province. It is contiguous with the Chimanimani National Park in Zimbabwe.

Demography

Chimanimani TFCA has a small resident population estimated to be 350 people. There are few permanent settlements located on the Chimanimani massif above 1000m. Most permanent settlements occur below the 500 m contour, particularly along the three major river systems namely the Lucite, Mevomozi and Mussapa Rivers (World Bank, 1996).

The Chimanimani people are cross-border people having relatives on both sides of the border between Moçambique and Zimbabwe. Their activities span the border, e.g. farming on one side and living in the other side. Although there are no records of wildlife law enforcement in the Mozambique area during the colonial period or before the TFCA project started in Moçambique, the connections across the border exposed the Moçambicans to the repressive conservation and wildlife management systems adopted in Zimbabwe that started in 1896 with state backed land alienation and displacement of inhabitants (Hughes, 1999). More recently they were exposed to the change that occurred with the introduction of the CAMPFIRE program in 1989, in which the government devolved authority over wildlife utilization to Regional Councils (Jones, 1991). Thus, although the Mozambicans had little exposure to trends in conservation within Mozambique they were quite familiar with what was happening in Rhodesia and later in Zimbabwe.

Land and resources tenure

The Government of Moçambique fully recognises the rights of local communities over use of their lands. This has been established through the Land Law, which was approved in 1997. Under this Law, local communities⁴:

- individually, or collectively are entitled to have rights for the use and enjoyment of the land, as long as they have occupied such land for more than ten years;

⁴ *Local communities are defined as a group of families and individuals at a locality, or lower level, including the residential and agricultural fields, whether they are being tilled or under fallow, forests, places of cultural importance, pastures, water fountains and areas of expansion (Government of Moçambique 1997a).*

- *may use land without any period limitation, and payment of fees; and offered*
- *may take part in the: (i) management of natural resources; (ii) allocation of the right to use and enjoy the land; (iii) identification and definition of the boundaries of the land they occupy; and (iv) in solving land use conflicts (Government of Moçambique 1997a).*

The people of Chimanimani TFCA have strong traditional institutions that guide the manner in which natural resources are utilised. A culture of traditionally based nature conservation is well established through the community leadership and their system of sacred forests (Dutton and Dutton, 1975). This suggests that the Traditional Authorities could, should they so choose, use their authority to exclude others from access to resources.

The traditional leadership includes Chief Chikukwa who lives in Zimbabwe and is the most powerful in terms of general administration of the people and resources, and Chief Mahate, located in the Mahate area, who is the spiritual leader of the people living on the Mozambican side.

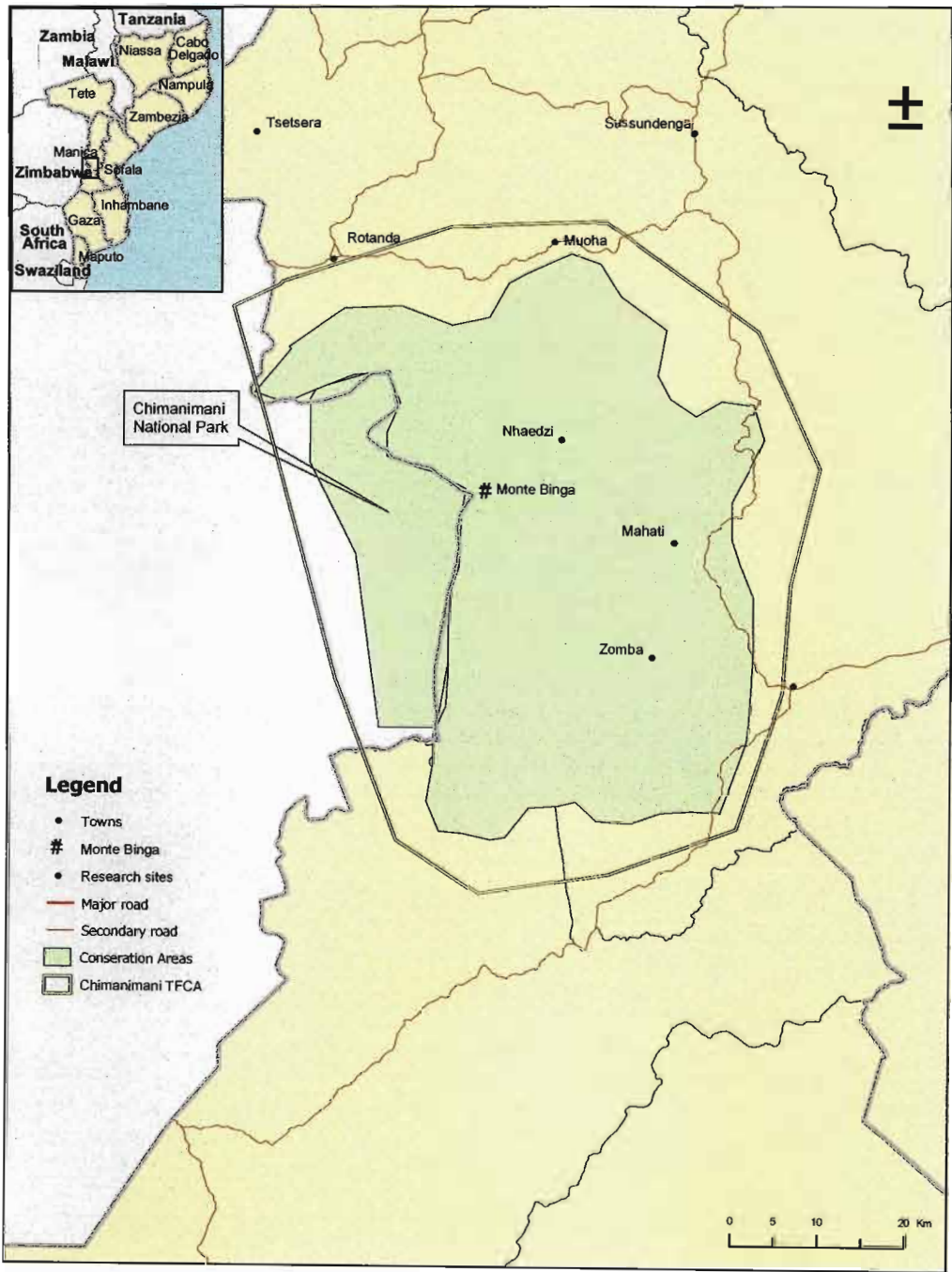
The locality of Dombe was one of the strongholds of the RENAMO, the main opposition party. RENAMO used to be a rebel group that fought the government during the civil war. After the war, the TFCA program was planned for the area but the officials experienced a lot of resistance because they were perceived to be connected with the party in power (Sousa et al., 1996).

Biophysical features

The Chimanimani area includes the eastern escarpment and foothills of the Chimanimani massif, and the peak is Monte Binga at 2437 m. It has diverse flora and fauna, spectacular landscapes, and rich historical and archeological sites (World Bank, 1996).

The area supports among the highest floral endemism and diversity in Mozambique and includes unique landscapes (Hutton, 1995).

Figure 3.3. Chimanimani TFCA. Source: Ministry of Tourism (2003)



Source: Ministry of Tourism (2003)

Chapter 4

Colonisation, Civil War and Wildlife Conservation in Moçambique

4.1 Introduction

This Chapter introduces some critical historical stages for wildlife in Moçambique. Particular reference will be made to how the policies and legislations started and developed. The evolution of wildlife policy and legislation in Moçambique can be traced through four distinct periods, each with specific influences on the conservation of wildlife.

(i) Pre-colonial era

There is very little available information about the pre-colonial era regarding wildlife in Moçambique. Wildlife resources in Moçambique were protected, just like in other African countries, from the most disruptive human influences by various factors. These included the country's relatively simple technology, cultural factors such as tribal warfare that kept wide areas as wilderness "buffer zones" between rival groups, and cultural taboos that prevented over-exploitation of wildlife resources (e.g. Munthali, 1993; Metcalfe, 1995). Furthermore, although there were no written wildlife policies and legislation during this era, the use of wildlife resources was governed by traditional controls through chiefs, and village headmen, who regulated access to natural resource use in their territories. Also, ritual prohibition of hunting, and harvesting of natural resources in some areas (such as sacred forests), magic and taboos relating to certain wildlife species, regulated the number of people that harvested and used the natural resources.

From the tenth century, long before the Portuguese arrival, there was a commercial relationship between the African tribes and the Swahili Arab, and amongst the various products that were supplied by the local people, wildlife products such as ivory and rhino horns were traded (História de Moçambique, 1974).

The fact that the pre-colonial societies had the perception that wildlife resources were representing a valuable source of food, medicines and other commodities for the people, led traditional authorities to set and implement regulations over the wildlife use that played an important role in its conservation.

(ii) Colonial era

The onset of the colonisation in Africa by Europeans in the 1500's marked a period of intense unsustainable exploitation of wildlife. The existing trade in ivory for example, was stimulated by the Portuguese and Arab traders, who influenced local chiefs to supply elephant tusks and thus played a major role in the local demise of African elephant (*Loxodonta africana*) populations. In Moçambique by 1505, the Portuguese were established in Sofala as traders and afterwards as colonisers until independence in 1975

(História de Moçambique, 1974). Initially, the Portuguese sent deportees (*os prazeiros*) to Zambézia where they worked in gold mines for sometime before they were allowed to go back home or settle. Three periods can be distinguished with respect to colonisation in Moçambique: the *Gold Trade Phase* (10th to 17th century), the *Ivory Trade Phase* (Century 17th to 18th century) and the *Slave Trade Phase* (18th to 19th century) (História de Moçambique 1974). During the Ivory Trade Phase, the Marave, Carungo and Lundu Kingdoms had included elephant hunting for ivory trade in their socio-economies. They were exchanging ivory for Indian-made materials and for products such as glass beads from Venice in Italy. During this particular time Mozambique was “ruled” from Goa, India, where the Vice-King of Portugal was living (História de Moçambique, 1974).

In Goa, a company known as Mazanes, was formed and run by Indian traders with the main objective of trading in Moçambique. These Indians established themselves in Nampula and were responsible for the increment in ivory trade within Nampula and areas surrounding the Lake Niassa. The main trade centres were Mussoril, Cabaceira Grande, and Cabaceira Pequena. Due to competition in the ivory trade, there were sometimes fights among the African tribes, as each wanted to control the business. For example the Morimuno, who were established in an area that stretched 60 Km along the coast (from Nampula to Cabo Delgado), were blocking the transit of *ajauas* who were taking ivory from Lake Niassa to the coast for exchange with glass beads brought from Europe. The Maputo Bay was another centre for ivory trade and other wildlife products such as rhino (*Dicerus bicornis*) horns and Hippopotamus (*Hippopotamus amphibious*) teeth. The ivory being traded was from all over Maputo province, including some parts of Natal in South Africa (História de Moçambique, 1974).

The export trade of wildlife products from the Maputo area was controlled by the Dutch, Portuguese, Austrian and British, with African dominant classes such as the Nguane and Nduandue. In Maputo Bay the recorded weight of elephant tusks traded by an Austrian company in a period of 4 years, for example, reached 20 000 tonnes (História de Moçambique, 1974).

Perceptions of the value of wildlife products in foreign countries drove pressures for exploitation in a situation of increasingly ineffective traditional regulatory instruments, and the absence of other appropriate policy and legislation.

Besides trade in wildlife products, the Portuguese colonialists partitioned land into Coutadas⁵ which were set aside for the colonial masters' recreation in the form of sport hunting and hunting for game meat, and Open Areas which were available to local people for cultivation, and collection of resources. All the prime areas were set aside as hunting preserves. Outside these areas, the Portuguese had little interest in preserving wildlife (Dias et al., 1963).

The first wildlife legislation in Moçambique was issued in 1903, focussing mainly on regulating hunting in the Maputo area. However, in August 1909 the decree was revised to cover the whole of the country. The Portuguese legislation, throughout the colonial

⁵ Hunting areas

period, was more inclined towards wildlife utilisation for trading, food and for sport than towards protection. For instance, of the 92 200 km² set aside as wildlife areas, 56 700 km² were Coutadas (*i.e.*, 61 %) and 35 500 km² as protected wildlife areas in which some hunting by the elite colonialists was also allowed, including hunting for supply of meat to farm workers (Dias *et al.*, 1963). The Portuguese did not acknowledge the aesthetic, and ethical values of wildlife, hence their policies and legislation emphasised consumptive use of wildlife, and did not link wildlife conservation to socio-economic development of the rural African communities.

The Portuguese wildlife policies remained non-committal to preservation until after the 1933 London Convention on the protection of the African wild fauna and flora. According to Gomes de Sousa (1938) the educated classes of the Portuguese society did not exhibit any conservation culture and this resulted in delays in taking actions to implement the London Convention.

Nevertheless, the London Convention (1933) was instrumental in forcing the Portuguese colonial government into issuing the Decree number 37 188, on 24th November 1948, ratifying the London Convention and declaring their commitment and support for the conservation of flora and fauna (Pro Natura, 1972). However, it took nearly seven years to issue another decree in January, 1955 to implement the London Convention. The 1955 decree established the first principles aimed at protection of soil, wild fauna and flora. These principles recommended that:

- wildlife should be State property and utilised under government licence;
- the State should conserve wildlife;
- endangered and threatened wildlife species should receive special treatment; and
- for the purpose of conserving, protecting and propagating wildlife resources, the State should create protected areas

Under the principles of the Decree of 1955 and during the decade of 60s, National Parks, Game Reserves and Hunting Areas were gazetted. The National Parks and Game Reserves were created to fully protect nature, without designating any role to local people. The Hunting Areas were created to develop sport hunting and they were rented to private operators. In these conservation areas the legislation recognised the right of local people to hunt non-trophy animals to satisfy their dietary needs. The colonial Government also established a licensing system for hunting outside gazetted areas, mainly for meat purposes (Rosinha, 1973).

In summary, the Portuguese colonial wildlife policy legislation failed to promote the use of the wildlife as a resource to improve the socio-economic status of the local Moçambican people. In effect, policy and legislation allowed the colonial masters to benefit through recreational export of valuable wildlife trophies overseas and they legally enjoyed the bulk of the game meat hunted from vast areas set aside for that purpose.

It took other, foreign, parties perceptions of the state of the African resources to establish the London Convention, which influenced the Portuguese. However, Portuguese perceptions only changed superficially as evidenced by the slow steps taken after the ratification of the London Convention in 1948. The dominant perception was that wildlife use should be oriented for trophy hunting and enjoyment of meat as a delicacy and it ignored both the needs of and the potentially important socio-economic value of wildlife for the rural people. In significant ways it marginalized indigenous people from these resources.

It is clear from this analysis that:

- such policy as existed, reflected only the perceptions and interests of colonial elites. This being so, and applying the conceptual framework in Fig 2.1., it would sooner or later come under pressure from perceptions held by other stakeholders;
- international stakeholders perceptions forced a process of revision on a reluctant Government with the result that implementation was slow and still favoured the elite colonialists; and
- the continued ability of government to marginalize indigenous stakeholders was reflected in the state of the system (threatened megafauna), which prompted international stakeholders to motivate change. As their interest was centred in the resource and in the welfare of indigenous populations, policy revision would reflect protectionism and human welfare. The conceptual framework postulates that once free from colonial governance, indigenous peoples perceptions would be felt in the shaping of policy and legislation. It could be anticipated that welfare would gain prominence in policy. This should in turn lead to a greater support for wildlife management amongst indigenous people, particularly as they benefit from the goods and services associated with wildlife in the contemporary economy.

iii) Post-colonial era

The Moçambican Constitution adopted in 1975, on independence, nationalised all natural resources and brought them under the direct control of the state. The Government saw the need to intensify conservation activities in all the proclaimed protected areas, as well as to diversify activities within Coutadas by introducing other forms of use, besides hunting of wildlife. Complementary activities that were proposed included game farming and domestication of wildlife for meat production (Tello, 1986). In light of this approach donors were requested to provide both financial and technical support to the Wildlife Services.

In 1977 the independent Government revised part of the wildlife legislation, which was inherited from the colonial Government. The revised legislation, “*Legislação Sobre as Actividades da Caça*” (***Legislation for Hunting Activities***), considered the social component of conservation. This was through provision of rights to local communities to

legally participate in wildlife utilisation, particularly the uses of wildlife meat. To do this, communities had to be organised into co-operatives.

Game meat was the main wildlife product that the law allowed local communities to benefit from. This was facilitated by payment of low fees but, in some cases, payment of fees was exempted for those rural communities that were organised in co-operatives. This was intended to give expression to the socialist form of government that prevailed at the time. People were required to organize into cooperatives if they were to access benefits from wildlife. Members of co-operatives had a committee that represented them in obtaining licenses from government and for leading the process of planning and decision making. However, at the same time, wildlife was seen by the government as an asset for developing tourism and the country's economy, but it had yet to formulate a clear policy and framework of how this was to be achieved.

The government recognized that the people were in need (Fig 2.1.A) of wildlife and that the policies and regulations were no longer appropriate (Fig 2.1.C, D) as they would be inconsistent with mounting pressures (Fig 2.1.B). The net result would be failure to achieve a preferred state of the resources system (Fig 2.1.B1). This acted as a driver for revision and formulation of policy and regulations to accommodate the needs of people and promote sustainable use (Fig 2.1.1 D).

To improve the wildlife sector, the government analyzed the shortcomings and requirements for the wildlife and allied institutions in Moçambique (FAO, 1992). Two of the shortcomings identified included were:

- lack of a coherent policy for the wildlife sector; and
- weak institutional capacity of the wildlife sector (Fig 2.1 E).

The FAO (1992) pointed out that there were already valid recommendations such as:

- a Wildlife Study Centre should be established, and that technical advisers be recruited to assist in restructuring the National Directorate of Forest and Wildlife (Tello 1984, 1986 in FAO 1992); and
- National Directorate of Forest and Wildlife (DNFFB) should be substituted by another Directorate, known as "National Directorate of Wilderness Resources" (Direcção Nacional dos Recursos Silvestres, DNRS) composed of four sectors: Forest, Fauna, Inland Fisheries and Coastal Zones (Tinley 1990). This Directorate would be co-ordinated (along with other Departments including, Lands, Agriculture, Water Resources) by Resource Council, falling under the Ministry of Environmental Affairs. This interagency Resource Council would comprise representatives of each resource agency, thus providing for the needs of an integrated planning approach.

Neither of these two recommendations seems to offer real prospects for improving the institutional capacity in the wildlife sector. Technical assistance with restructuring and improving integrated planning between agencies would certainly help, but they are not

likely to bring about the institutional capacity required to implement policies promoting participatory management at local level. It would appear that the relationship and assumptions between D and E in Figure 2.1.1 were not made explicit. This would lead to their importance not being appreciated, which would in turn, lead to failure of implementation of policy.

However, the civil war that erupted between the government and the opposition RENAMO undermined these recommendations, including the development of tourism, and further weakened the government's capacity to manage wildlife in ways consistent with policy. This war covered the entire country and ended in 1992 after a long period of 12 years.

During the war wildlife resources governance was completely disrupted. The war had become the priority in the country. The prevailing needs of deprived local people (Fig.2.1. A) and perceptions of the military in both sides were that wildlife resources were a "free good" for food supply and trophy smuggling (ivory and rhino horns) for money to pay some costs of the war, without taking into account the sustainability of these approaches to use. The war effectively created a situation in which extant wildlife policy and legislation were ineffective and thus became irrelevant. Once peace was re-established policy and legislation had to be reviewed.

It is demonstrated from this review of policy and legislative process during the post-colonial era that:

- soon after independence indigenous people's perceptions could be drawn into the policy reform process. This directed a change in policy to be in better accord with their perceptions of how wildlife should bring benefits to them. Although this process may not have been consultative, it did reflect the growing dissatisfaction of indigenous people in regard to access resources and benefits accruing from use;
- change in policy would require additional capacity and new implementation competencies. If these were not provided, the increased scope of implementation would be accompanied by a relative reduction of government resources for implementation. Whilst recommendations were made, civil war created conditions in which both policy and implementation were irrelevant;
- The civil war saw a pragmatic use by government of policies for resource use in that they were never gazetted. These were largely shaped by perceptions of the value of wildlife as sources of food and money for the war effort. These informal policies (Fig 2.1. D) created unsustainable patterns of use (Fig 2.1.B) which determined a new state of system (Fig 2.1.B1) This state would after the war, be the factor determining perception of government (Fig 2.1.C) and society (Fig 2.1.F) that would lead to a policy reform (Fig 2.1. D). The war caused international stakeholders to lose their influence on government (Fig. 2.1.C) policy formulation and implementation (Fig. 2.1.D) during this period; and

- whilst the conceptual framework can be usefully applied to interpret policy responses during the civil war, it has to be appreciated that in civil war wildlife policy does not have a central relevance, and there may be little congruence between the formal policy and factors such as perceptions and pressures. Once peace was established there was a need to reconstruct the policy.

(iv) Post-civil war era

After the Peace Accord of 1992 between the government and RENAMO, the wildlife policy formulation process started in 1994. This was preceded by the elaboration of “Linhas Gerais para uma Política de Fauna Bravia” which means: The General Guidelines Toward a Policy for Wildlife Conservation (DNFFB, 1992). The staff at headquarters elaborated this document with no consultation with stakeholders. In fact as most of conservation areas were still inaccessible at that time, it would have been exceptionally difficult to engage local people. These guidelines were based on scanty information about the wildlife situation in the country the state of the system, (Fig 2.1. B1), hence they simply formed a framework for a policy that was developed in the subsequent years. The guidelines focussed, *inter alia*, on:

- wildlife resource surveys to improve the knowledge of the state of the system;
- emergency rehabilitation programmes for the main protected areas such as Gorongosa National Park. This would among other things, create a platform for shaping perceptions of stakeholders (Fig 2.1. B1 and F);
- training in wildlife management, so that management policy could be implemented (Fig 2.1 D,E);
- logistic support to wildlife services;
- establishment of pilot Community Based Natural Resources Management (CBNRM) projects to create platform to influencing local stakeholders perception (Fig 2.1. D, E); and
- development of management plans for protected areas.

Government perceptions of the value of wildlife as one of the most important resources to attract tourism in the region, together with the perception that the biodiversity values are linked with the livelihood of peoples, determined the need for revision of the policy and regulations.

Subsequent to formulation of these Guidelines the Government initiated a process of developing comprehensive Policy for Forest and Wildlife (DNFFB, 1996).

This revision of policy for wildlife was seen as a priority because of the need to rehabilitate conservation areas and restock depleted protected areas with wildlife.

Wildlife in this process was seen as an asset that would stimulate the development of the country, particularly in the rural areas through involving rural communities in the rehabilitation and management of natural resources (DNFFB, 1996). This recognition of the importance of local stakeholders' perceptions of the state of the system as an input into policy reform and a determinant of collaboration and use (Fig 2.1), required Government to adopt a consultative approach.

The Government of Moçambique with support of donors and using a consultative approach drafted the following regulatory instruments for forest and wildlife: the policy in 1996, the legislation in 1999 and the regulations for the legislation in 2002. For the purpose of consultation during this drafting process, the country was divided in three main regions, namely, the northern, center and southern regions. The regions incorporated provinces located in the respective region.

The DNFFB at central level, drafted the initial proposal which was submitted to the three regions. One provincial capital city was selected to host the regional consultative meeting. Stakeholders such as the private sector, other Government sectors and representatives of local communities were invited to participate.

Government was responsible for funding the participation of Government representatives and local community representatives. Due to budget constraints, the consultation meetings were attended by a limited number of local community representatives. The meetings favored participation by representatives who had easy access to the venue, and disadvantaged to those who were living in remote areas.

However, in the case of the center region, that included the provinces of Manica, Sofala and Tete, the regional meeting was preceded by provincial meetings, in which the district representatives (including relevant stakeholders, private sector local communities and NGOs) participated and discussed the draft document. These provincial meetings served as preparation for the regional meeting as they provided the three provinces with inputs from more stakeholders from communities, and these were taken to the regional meeting. In the final stage the draft document was submitted to a national meeting of DNFFB. Then the document was submitted for approval.

The majority of meetings, mainly the regional and national meetings, were conducted in Portuguese, which disadvantages local community representatives. Taking into account that according to INE (1999), about 70% of Moçambican citizens are illiterate and most of them reside in rural areas, the adequacy of representation of local communities is questionable. The invited people were selected with some bias as in most of the areas where the representatives were from; there was no prior study to establish who should represent people's wishes. Commonly those elected to represent local communities can vary from the traditional leaders (case of Chimanimani), spirit mediums, local Government, to Government installed leaders. Therefore, the people invited were those who were recognised by Government as community representatives, but they were not necessarily thus recognised by the people.

The process was further compromised in that Government conducted consultations during the drafting of the policy and legislation in restricted areas, mainly those that had facilities for meetings, such as the headquarters of the Provinces and Districts. As use of such facilities can be daunting for people from remote rural areas it can further compromise the process. From the consultative meetings with stakeholders the main issues raised were as follows:

- widespread and uncontrolled distribution of firearms that were used for illegal hunting. This had three main characteristics: (i) for meat consumption made by rural people (ii) to obtain meat for selling, made by both rural people and inhabitants of surrounding towns (iii) for trophy, organized by people from towns looking for skins (leopard and zebra), elephant ivory and rhino horn;
- conflicts between human population and wildlife for example warthogs, baboons, elephants and duikers riding crops and leopard and lions eating livestock;
- Government was too weak to control the resources and respond to problems as mentioned above. It did not have clear strategy for the future of wildlife including for involvement of both private sector and local communities who wanted a much clearer policy on their role, responsibilities and benefits;
- it was difficult to abide the legislation in relation to the procedures to obtain hunting licenses for local communities as licenses could be issued from main towns which for most cases were very far from the residences of people;
- the SADC region was quite advanced in management of wildlife, therefore the country should use the opportunity to establish collaboration and cooperation (DNFFB, 1991b)

The war impoverished the country and wildlife and the country was obliged to request support from the international community. Donor funding was provided on understanding that the development of policy would be consultative and stakeholders had to be continually brought into the policy reform process. The conceptual framework indicates that the perceptions of stakeholders would shape the emerging policy. Evidence for this is that the policy addresses:

- CBNRM;
- TFCAs; and
- partnerships in management of protect areas and wildlife

The next chapter considers current policy showing how this has been shaped by perceptions. Two important perceptions are illustrated: one is a widely held perception that use of protected areas should include private sector commercial operation; the second, which reflects local perceptions of need and widely held perceptions around sustainable use, is that local communities should be participants in decision making and management of protected areas.

Chapter 5

The Government Capacity and Partnerships

5.1. Introduction

Whereas Chapter 4 traced the evolution of policy and used the framework concept (Fig 2.1.) to interpret and analyse the process and implications, this Chapter focuses on the current policy and Government capacity and experience of implementing it. The framework makes a link between policy, implementation and perceptions of society that determine the willingness to collaborate with Government and support policy.

5.2 Policy

The goal of the Forest and Wildlife Policy is “to conserve, utilise and develop forests and wildlife resources for social, ecological and economic benefits of the present and future generations of the Moçambican people” (DNFFB 1996). With respect to this goal DNFFB is required to address the benefits as follows:

Social – addressing the role of forest and wildlife resources in alleviating poverty and in increasing the participation of rural communities in the management and sustainable use of these resources;

Ecological - aiming at the conservation of forest and wildlife resources; and

Economic - aiming at reinforcing the role of forest and wildlife resources in the promotion of economic development, satisfaction of people’s needs for forest and wildlife products, generation of revenues and contribution to national finances through efficient revenue collection (DNFFB, 1996).

This policy notes that in as far as the relevant laws permit, the Directorate for Forest and Wildlife as the Government agency, is committed to implement schemes which will:

- promote the establishment of community resource management regimes involving recognised communities and that reflect the roles of women;
- introduce mechanisms which progressively affirm the existence of customary rights and ensure exclusive access to natural resources in customary areas;
- permit sustainable commercialisation of these resources for community benefits, and provide for concession arrangements with government; and
- involve rural communities in the management of State Protected Areas, through specific arrangements such as Biosphere Reserves.

With regard to the private sector, the policy:

- encourages the private sector, which includes both formal and informal elements, to

contribute to the national economy and rural development through participation and investment in the conservation and management of forest and wildlife resources;

- seeks the involvement of private sector in all categories of land use, including state protected areas;
- encourages potential concessionaires to enter into direct negotiations with recognised communities and requires that tenders for concession allocations incorporate community agreements, guaranteeing existing customary rights; and
- fosters a transparent and competitive process for private sector investors.

In the case of non-governmental organisations (NGOs), the policy:

- encourages them to assist in capacity building at local levels through helping rural communities to organise themselves into workable groups, and assists them in addressing their problems;
- supports development of management skills of the rural communities; and
- facilitates the seeking of funds from international donors for the conservation of biodiversity.

With regard to local communities the policy:

- promotes and enables the development of community resource management regimes involving recognised communities, and which reflect the role of women;
- empowers communities by (i) affirming existing customary rights and ensuring exclusive access to natural resources in customary areas (ii) permitting sustainable commercialisation of these resources for community benefit; and (iii) providing for concession arrangements with government; and
- provides for involvement of rural communities in the management of state protected areas through such mechanisms as Biosphere Reserves.

Complementary to the 1996 Forest and Wildlife policy are numerous policies and regulations that create an enabling environment for rural communities to participate in, and benefit from natural resource management. These include the:

Revised Tourism Policy (DINATUR, 1995) - This policy states that tourism development should be done in a gradual way. The private sector is seen as the major stakeholder that should drive investment, while local communities are seen as stakeholders that should benefit through employment and should be fully participating in tourism ventures to promote long-term sustainability. The Government also recognises that tourism development in Moçambique should be competitive at a regional level, and that it should contribute to the conservation of ecological, historical and cultural values of the country;

Revised Forest and Wildlife Legislation (DNFFB, 1999) – The need to operationalise both

the forest and wildlife policy and forest and wildlife legislation has been seen as a priority. The main legislation has been revised, but regulations are in the process of development through extensive consultations with national stakeholders. The legislation provides a regulatory mechanism for conservation and sustainable use of forest and wildlife resources, and provides:

- for the creation of protected areas (including areas of historical/cultural values) that may be established based on communities initiative and under their management through customary laws;
- mechanisms for local communities to increase their role in management and sustainable use of wildlife; and
- mechanisms for involvement of the private sector in management of wildlife through a transparent concession allocation process.

Land Law - this law provides a legal mechanism through which local communities would be empowered to control use of their land and the natural resources occurring on it. Under this law:

- Moçambicans, collectively or individually, men and women, as well as local communities may be subjects of the land use and enjoyment right;
- nationals, individually or collectively may obtain the right to use and enjoy land, individually or with other individuals, or collective people (Company), under the form of co-title holding;
- the right to use and enjoy land for communities or national individuals can be acquired through occupation and use of the land in good faith for at least ten years;
- individuals of both genders who are members of a community, may request individualised titles after the respective parcel of the community area has been demarcated;
- in the case of local communities, the right to use land is not subject to any period limitation, or fee payment, although for reasons of public interest the rights to use any piece of land can be revoked by the state after compensating the land occupiers; and
- local communities in rural areas are empowered to take part in (i) management of natural resources, (ii) allocation of the right to use and enjoy the land, (iii) identification and definition of the boundaries of the land they occupy and (iv) in solving land use conflicts.

In summary, the Government of Moçambique developed in 1996, a policy for forest and wildlife that addresses the three important aspects of wildlife conservation namely, social,

ecological and economic. The policy for forest and wildlife conservation addresses particularly the ownership of the natural resources by the rural communities so that they may tangibly benefit from the development, management and sustainable use of these resources. This represents a significant advancement comparative to previous policies for wildlife resources of Moçambique.

Although there was no explicit framework guiding the process of policy and legislative revision, it is apparent that the conceptual framework developed for this research can be used to make the process and its underlying assumptions explicit. The Government clearly recognized different stakeholders and sought to understand their perceptions and used this in the revision, in anticipation that this would lead to support for both policy and its implementation. Government also assumed that through these partnerships it would be possible to mobilize sufficient resources (human and financial) for implementation. Government did not, however, make the process and the assumptions explicit. Consequently interpretations and expectations may differ. The validity of the assumptions is considered later.

The conceptual framework Fig 2.1 indicates that the state of the resource system is a determinant of perceptions, which, if necessary, leads to a call for policy revision. This analysis suggests that perceptions of local people were predominantly shaped by welfare wishes such as access to wildlife and security of resource (land particularly) tenure. In the other hand the private sector needs an enabling environment to be able to invest with security of its capital. Whilst government shared these, the degraded state of the system of protected areas and wildlife was also a factor of driving their need for policy reform.

5.3 Institutional organisation and capacity

5.3.1 Introduction

Moçambique has about 570 000 square kilometers of natural forest cover and 92 200 square kilometers of protected areas and hunting areas. Wildlife is dispersed throughout the country (DNFFB, 1991b). The management of wildlife can be successful only if is conducted in an appropriate institutional organization with adequate financial and staff capacity, to perform the functions.

The commitment to local participation, the recognition of the need for decentralization are some aspects of the policy reform that are responsible for the change in the approach to managing use of forest and wildlife. The framework shows that failure to effectively implement accepted policy influences perceptions negatively and therefore support for implementation. Clearly if government fails to appreciate this and does not develop an appropriately structured and resourced administration, the consequences are likely to be policy failure and conflict.

This section presents and evaluates the institutional set up of the Directorate of Forest and Wildlife, and its capacity to implement the extant forest and wildlife policy and legislation. Consideration is also given to the financial resources that are available to implement the

required activities.

5.3.2 Institutional organisation

Presently responsibility for managing the forests and wildlife resources in Moçambique lies with the National Directorate for Forest and Wildlife (DNFFB, 1991a), which comprises four main Departments, namely:

- Department of Wildlife;
- Department of Forest;
- Department of Economics and Planning; and
- Department of Anti-poaching.

DNFFB is one of seven National Directorates that are under the Ministry of Agriculture and Rural Development. This structure makes explicit the intended link between wildlife and rural development.

The description, evaluation and discussion will focus on in the institutional organisation and capacity of the Department of Wildlife as this is the relevant government implementing agency for TFCA, which are the protected areas under consideration in this research⁶.

The Department of Wildlife comprises two Divisions, namely:

- (i) **Division of Exploitation and Sustainable Use of Wildlife** – This Division is required to:
 - regulate and control wildlife utilization and hunting activities in Coutadas and in open areas;
 - regulate, control and promote game farming, animal capture and trade; and
 - implement the Convention on International Trade in Endangered Species of Flora and Fauna (CITES).
- (ii) **Division of Protected Areas Management** - This Division is required to:
 - promote the participation of private sector and local communities in management of National Parks and Game Reserves;
 - co-ordinate and support the process of drafting the management plans for protected areas, such as National Parks and Game Reserves;

⁶ This role was transferred to the Ministry of Tourism in year 2001

- provide the support for development and implementation of management plans and management of the protected areas; and
- provide policy guidance and supervise the protected areas.

The Provincial Services for Forest and Wildlife (SPFFB) are integrated into the Provincial Directorate for Agriculture and Rural Development (DPDR) and have a dual subordination to both DPDR and to the National Directorate for Forest and Wildlife (DNFFB). The functions of the Wildlife Department are replicated in the 10 provinces of the country.

There is a Head of Forest and Wildlife Services (SPFFB) who represents the National Director. Under him/her there is a Head of Wildlife Division and other Divisions at the DNFFB are replicated at SPFFB level, except Economics and Planning, which is performed by the Head of SPFFB. Each District is supposed to replicate the same structure. However, due to lack of personnel the structure varies from one District to another according to their human resource capacity.

With the objective of co-coordinating, facilitating and promoting the development of community based management of natural resources, in the context of forest and wildlife of Mozambique, through participative methods, processes and projects, the DNFFB established an interim structure called Support Unit for Community Based Forest and Wildlife Management (DNFFB, 1998). The Support Unit is located at central level, although is not part of official organogram of the DNFFB. The main tasks of the Support Unit are:

- establish a co-ordinating committee, with participation of the main stakeholders in community based forest and wildlife management (CBFW) in Moçambique, to plan, lead and evaluate the actions of the Unit;
- promote the development of participative projects in community based forest and wildlife management in selected areas in accordance with criteria to be determined;
- maintain a data base and documentation center about the NGOs, projects and process of CBFW in Moçambique and in the region;
- develop participative methodologies for conservation and sustainable use of forest and wildlife resources by the communities;
- provide technical support regarding the CBFW to the Departments of the Ministry of Agriculture and Rural Development, Provincial Directorate of Agriculture and Rural Development, Provincial Services for Forest and Wildlife and the District Directorates of Agriculture and Rural Development;

- identify the legal and institutional limitations that would affect the implementation of the CBFW and develop strategies to overcome them; and
- support research and training at all levels in the field of CBFW.

The Unit is represented in the provinces by a community focal point, a member staff who has the responsibility of implementing the terms of reference of the Community Unit at provincial level.

The institutional framework under which forest and wildlife resources are managed and the staff complements and qualifications are shown own in Fig. 5.1. and Tables 5-1, 5-2, and 5-3.

From the knowledge of the author, apart from the Gorongosa National Park that has an organization structure that creates the post of one Warden and refers to game guards without specifying the numbers and ranks, parks in Moçambique do not have an organogram that shows the organisation structure, roles and responsibilities of personnel. Presently, the Gorongosa National Park, Marromeu Game Reserve, Bazaruto National Park, Banhine National Park, Zinave National Park, Maputo Elephant Reserve and Niassa Reserve each have each a warden. These protected areas also have game guards, in variable numbers, subject to decision of the warden and availability of funds to pay salaries. The wardens of Gorongosa National Park, Bazaruto National Park and Maputo Elephant Reserve are satisfied with the number of game guards, while in other areas they feel that they need to increase the number of game guards.

Wildlife management is a complex field that would require diversification of expertise, of academic qualifications and experience. Tables 5-1, 5-2 and 5-3 illustrate that the numbers and the levels of qualification of personnel directly involved in wildlife management are not adequate at all levels (DNFFB, SPFFB and protected areas). There is only one person among the personnel who holds a specialist degree in wildlife management in protected areas. The rest of the graduate staff working within protected areas are veterinarians or biologists. The DNFFB has one veterinarian, with a postgraduate course in wildlife management and the other has a postgraduate course in wildlife diseases. Regarding the other staff at DNFFB and SPFFB there are veterinarians, biologists and foresters who were exposed to short courses related with wildlife management. All graduate staff has less than 10 years experience. As wildlife management policy specifically requires the integration of environmental social and economic factors it follows that management incorporates crosscutting dimensions. The DNFFB does not have the necessary diversification of competences to address these different aspects of wildlife management as required by policy.

According to the PROAGRI report (1997) the DNFFB is an institution that has inadequate capacity to implement the wildlife policy and legislation. Promotion of sustainable use of forest and wildlife resources is impossible under such conditions of staff. Consequently, illegal use of resources (Fig 2.1.) may be continuing uncontrolled and unmonitored, leading to over-utilization of resources, regardless of the policy intent.

Central Level

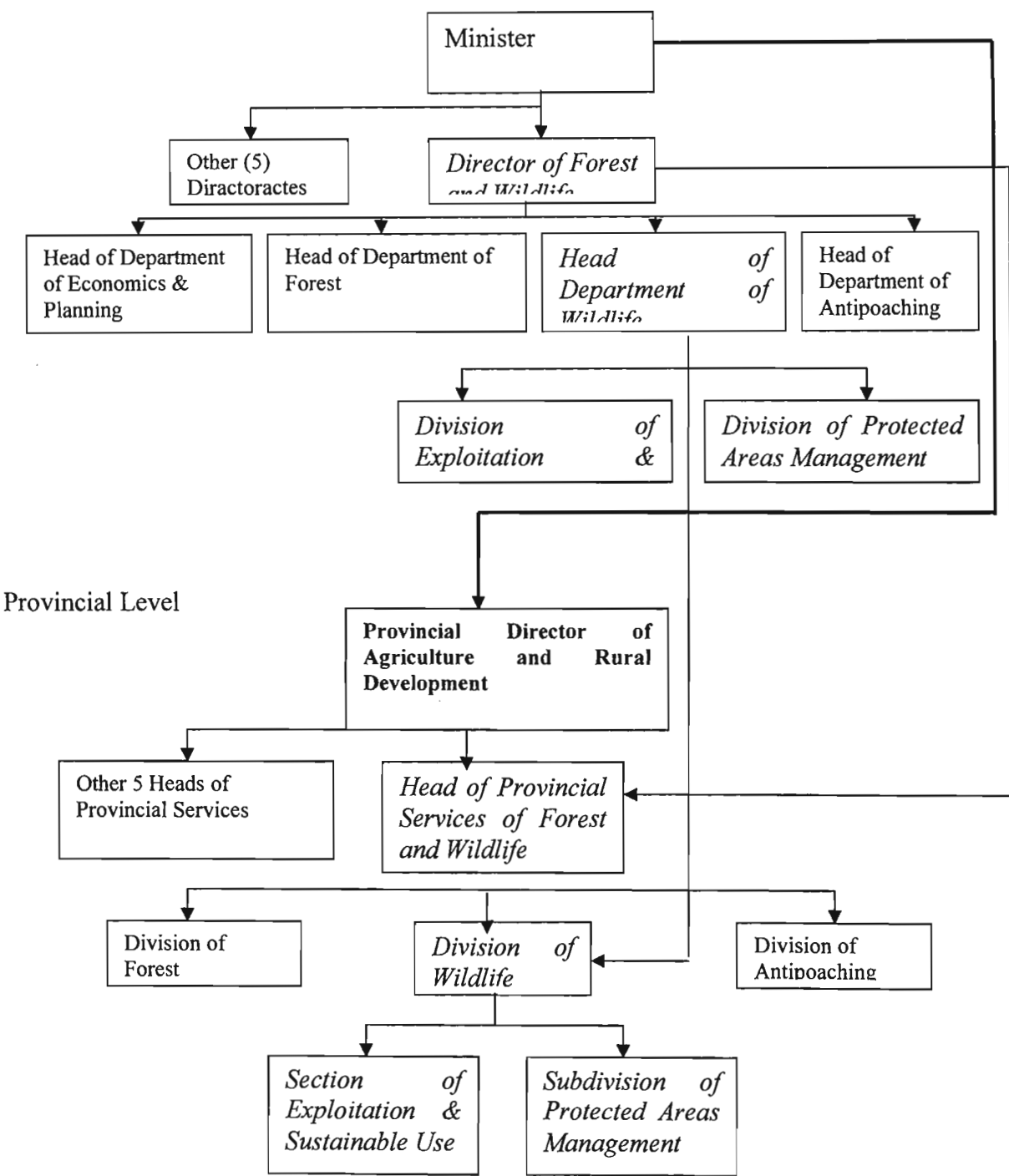


Figure 5.1 Institutional organisation of the Directorate of Forest and Wildlife in Moçambique. Those shown in bold are relevant for this study

Table 5-1: Distribution of staff, working in the Wildlife Sector at central level (DNFFB) and lower levels, including their qualifications⁷

Location	Division	Number of staff	Qualification
DNFFB	National Director	1	Forestry (MSc)
DNFFB	Deputy National Director	1	Vet (BSc)
DNFFB	Head of Department of Wildlife	1	Vet (BSc)+ Hons ⁸ Wildlife Diseases
DNFFB	Exploitation and Utilisation of Wildlife	1	Biologist (BSc)
DNFFB	Exploitation and Utilisation of Wildlife	1	Basic level
DNFFB	Protected Areas Management	1	Vet (BSc) +Hons Wildlife Management
Total		6	

(Developed by the author, 2000)

Furthermore, because of the weak institutional capacity, there is a reduced capacity to identify and understand the key causes of pressures on resources, which results in a poor base for an appropriate policy revision at various levels.

Reacting to these perceptions of the need to rehabilitate the national parks and wildlife, the government assumed it would be able to mobilize resources to provide staff for management of these parks and wildlife. It is clear from the policy that the intention was to share the responsibilities among the government and the private sector, and in this way bring in required additional competencies.

Information in Tables 5-1, 5-2 and 5-4 shows that there are only 25 academically trained personnel at National Parks and provincial level to administer the implementation of the policy. The situation at National Park level is that there are only fourteen staff with professional training and they are distributed in the main National Parks. Some parks have a single professional person while other such as Pomene and Gilé Reserves, do not have any. Only in the case of Gorongosa was there evidence of public-private-community partnership sharing responsibilities of providing staff for implementation of policy.

⁷ There are four recognised academic levels in Moçambique, which are Basic, Medium and Superior which is divided in BSc/MSc level and PhD level. The Basic level is equivalent to a level where technicians obtain basic skills; it is the initial phase to get into medium level. Both Certificate and Diploma levels are regarded in Moçambique as Medium level of a qualification.

⁸ Hons Degree - both in wildlife management and wildlife diseases were taken from University of Pretoria.

Table 5-2: Distribution of staff, working in the Forest and Wildlife Sectors at provincial level, and their qualifications.

Location	Division	Number of Staff	Qualification
SPFFB Maputo	Head of SPFFB	1	Forest (BSc)
SPFFB Maputo	Wildlife	1	Wildlife Management (Medium Level)
SPFFB Gaza	Head of SPFFB	1	Forest (BSc)
SPFFB Gaza	Wildlife	1	Vet (BSc)
SPFFB Gaza	Wildlife	1	Wildlife Management (Medium level)
SPFFB Inhambane	Head of SPFFB	1	Forest (BSc)
SPFFB Manica	Head of SPFFB	1	Forest (BSc)
SPFFB Manica	Wildlife	1	Basic level
SPFFB Sofala	Head of SPFFB	1	Forest (BSc)
SPFFB Sofala	Wildlife	1	Forest (Medium level)
SPFFB Tete	Head of SPFFB	1	Forest (BSc) + postgraduate in Wildlife Management
SPFFB Tete	Tchuma tchato coordinator (Magoé)	1	MSc Environment & Development
SPFFB Tete	Tchuma tchato coordinator (Daqué)	1	Wildlife Management (Medium level)
SPFFB Zambézia	Head of SPFFB	1	Forest (BSc)
SPFFB Nampula	Head of SPFFB	1	Forest (Medium level)
SPFFB Nampula	Wildlife	1	Forest (Medium level)
SPFFB C. Delgado	Head of SPFFB	1	Forest (BSc)
SPFFB C. Delgado	Wildlife	1	Vet (BSc)+ ⁹ postgraduate Wildlife Management
SPFFB Niassa	Head of SPFFB	1	Forest (BSc)
SPFFB Niassa	Wildlife	1	Basic level
Total		20	

(Developed by the author, 2000)

⁹ Postgraduate Diploma in Wildlife Management were taken from College of Wildlife Management, Mweka –Tanzania.

Table 5-3 Distribution of officers working in protected areas and their qualifications.

Protected Area	Size	Post	Number	Qualification
Gorongosa	3,750 Km2	Warden	1	Wildlife Management (BSc)
		Anti - poaching Chief	1	Vet (BSc)
		Tourism officer	1	Vet(BSc)
		Research officer	1	Wildlife Management (Medium level)
Zinave	4,000 Km2	Warden	1	Wildlife Management (Medium level)
Banhine	7,000 Km2	Warden	1	Wildlife Management (Medium level)
Bazaruto	150 Km2	Warden	1	Biologist (BSc)
		Community Liaison	1	Sociologist (BSc)
		Tourism Official	1	Finished secondary school
		Anti - poaching Chief	1	Medium level in Industrial, ex Military
		Anti poaching	4	Basic level
		Extension officer	5	Basic Level
Niassa*	22,000 Km2	Warden	1	Equivalancy of 2 nd year BSc Biology
		Deputy Warden	1	Wildlife Management (Post Diploma)
		Anti - poaching	1	Secondary School, Ex military
Marromeu	150 Km2	Warden	1	Vet (BSc)
Pomene	200 Km2	0	0	-
Gile	2,100 Km2	0	0	-
Maputo	800 Km2	Warden	1	Environmental Science (BSc)
		Ranger	1	Wildlife Management (Medium level)
		Anti-poaching Officer	1	Wildlife Management (Medium level)
		Research Officer	1	Wildlife Management (Medium level)

(Developed by the author, 2000)

* Niassa is managed by a “Society” comprised of the State, private sector and local communities. The warden is appointed by the private sector while the State appoints the deputy warden.

adversely on the private sector business and will bring the perception locally to declining support for policy and cause hostility.

5.4 Financial Capacity of DNFFB

The allocation of state financial resources to the agrarian sector, in which the wildlife sector is placed, has been declining during the last few years. For instance, the 1996 budget was reduced by 32% (externally sourced) and 28% (internally sourced) compared with 1995 (PROAGRI, 1997). Between 1992 and 1995 the State financial resources allocated to forest and wildlife management decreased from USD 1,4 million to USD 0,35 million (PROAGRI, 1997).

The DNFFB is getting most of its finances from donors who are funding a number of projects. It is intended that this will assist in implementing the extant policy and legislation, particularly in achieving acceptable levels of human and financial resources development. These projects include:

- ***Forest and Wildlife Resources Management Project (US\$11.8 million)*** funded by a loan from the African Development Bank. This project started in 1996 and had duration of 5 years. The project aimed at assisting in the development and management of commercial forestry concessions, rehabilitation¹⁰ of Gorongosa National Park and Marromeu Game Reserve, and to develop social forestry programs;
- ***Support for Community Forest and Wildlife Management Project (US\$9.6 million)*** funded by the Netherlands Government. This project started in 1997 and has a duration of 5 years. The project is implementing pilot community based management of indigenous forest projects in Nampula and Maputo provinces;
- ***Trans-frontier Conservation Areas (TFCA) Project (US\$5.0 million)***, funded by the Global Environmental Facility, through the World Bank. This project started in 1997 and has a duration of 5 years. The project promotes an ecosystem approach to the management of natural resources in some of the key biomes of the country's provinces of Maputo, Gaza and Manica. This project advocates a shift in emphasis from the command and control to an incentives-based system of management, and from centralised Government control to partnerships with the private sector and local communities; and
- ***Tchuma tchato (US\$500.000)*** – funded by Ford Foundation. This project started in 1995, and was initially programmed for 3 years. After the first phase for which funds were allocated were US\$200.000 for another 3

¹⁰ The rehabilitation means development of management plan infrastructures and operations such as resettlement of people outside protected areas, restocking ,etc.

years. The project promotes the implementation of CBNRM in the Magoé district in the province of Tete, as an approach to participatory management of use of wildlife resources amongst Government, private sector and local communities

The effectiveness of these projects in addressing the core problems of implementation of the extant policy and legislation have not been fully assessed, and it was not the purpose of this study to do so. This research is concerned with understanding of the interface between policy and implementation. Readers are referred to Maughan Brown (1998) and Namanha (1999) for the evaluation of some of these projects.

It is clear that government has reduced its contribution from the national fiscus and used loans and donor funding as the mechanism whereby it can fulfill its financial obligations. Whilst this is predicted to have positive implications for stakeholders' perceptions (Fig 2.1), these funds have not provided for Government to achieve levels of personnel that are needed. As long as government fails to make provisions for developing and maintaining the staff complement required to sustain implementation of its own policies, it places forest and wildlife at risk. Projects are "events" in the sense that they have short and usually specific intentions; management for sustainable use of forest and wildlife resources is a continuous process that needs to be sustained by effective Government. It can be argued that policy envisages that the strategy to achieve this has to be founded on partnerships, and this is considered in the next section.

5.5 Partnerships

The IUCN points out that due to an increasing trend for protected area management budgets to be reduced by the governments of developing countries, there is a need to find new ways in which management can be financed and implemented. The management of large protected areas is tending to become a joint venture involving organisations from a range of sectors, drawing on the strengths of each (IUCN, 1999). This collaboration in resources management can help to build understanding, support and capacity (Wondolleck & Yaffe 2000). To face the constraints in financial resources, the Government of Moçambique is encouraging partnership arrangements among different stakeholders in managing forest and wildlife resources, with the principal objective of relieving some of the DNFFB's implementation capacity constraints in both personnel and finances, and to reduce the cost to be incurred by the Government in achieving its conservation and natural resources objectives. For protected areas, the Government has approved two projects to develop and run partnership arrangements between Government, private sector and local communities. These two are the Maputo Elephant Reserve and Niassa Game Reserve.

The Government of Moçambique endeavors to rehabilitate and manage its protected areas to the highest standards possible using best practices. The principles for achieving this are provided in its 1996 forest and wildlife policy. Within this document three key strategies are suggested for improving the management of forest and wildlife resources, namely:

- (i) decision making where possible will be devolved to provincial, district, and local levels;
- (ii) investment will be made available to improve the capacity, expertise and numbers of DNFFB personnel and its representation at provincial level, to regulate and manage use of forest and wildlife resources; and
- (iii) stakeholders from different sectors are to be encouraged to play more proactive roles in the management of the use and protection of Moçambique's forest and wildlife resources.

The priorities are to develop consensus within the new alliances, enabling optimization of the use of available finite skills and resources. In achieving this, an adaptive forest and wildlife management approach has been adopted in which the development and management of the state protected areas, namely National Parks, Wildlife and Forest Reserves, and Coutadas, could be allocated via management contracts to agencies from outside the government (PROAGRI, 1997). The leasing of protected areas to the private sector will be done through a process of competitive bidding and a tender process that will guarantee transparency in the award of concessions (World Bank 1996; PROAGRI, 1997).

For land outside state protected areas, DNFFB is encouraging establishment of community based management regimes for natural resource use. However, to establish these community regimes, it is recognized that incentives and support will need to be provided to communities in order that they are able to assume new responsibilities (PROAGRI, 1997). To assist this process, DNFFB is currently co-ordinating the implementation of a variety of community-based natural resource management pilot projects in of Moçambique's provinces, such as Tete, Niassa, Cabo Delgado, Nampula and Maputo.

5.5.1 Implementation of Partnership Policy

Three quite different partnerships schemes that have been implemented in Moçambique are considered. These are Tchuma tchato in Tete Province, Blanchard SODETUR in Maputo Elephant Reserve and the Development Society of Niassa, in Niassa Game Reserve.

The Fig 5.2 presents the framework for partnerships anticipated by policy. It shows the participation of the three sectors, Government, private sector and local communities, forming a consortium. To operate, the consortium needs financial capacity which could be provided by the private sector, wildlife management skills that could be provided by private sector, Government and local communities, the resource together with an enabling structure and organization, which is envisaged as the major contribution of Government.

Tchuma tchato

In this initiative the three sectors are participating. The arrangements made by government are to allocate to local communities part of revenues collected from the operation of the private organization. The sharing of revenues works as incentive for local communities to participate in management of wildlife. The local communities and the Government also share responsibilities in controlling the resources, while the main obligation of the private operator is to run the business.

The Magoé district, the site of Tchuma tchato project, is located in Tete province in the northern part of Moçambique. The area has been under concession to a private company operating safari hunting, since the 1980s. This was one of few areas where safari operations were taking place in Moçambique during the war. The safari operations were conducted under conditions of frequent conflict between the private operator and the local communities.

In 1993, the DNFFB placed students who were studying for a Diploma in Wildlife Management in Mweka College, in the field for practical work for a period of six months. The students were sent to Magoé district to work with the stakeholders in order to address the growing conflicts. The students reported that there was a critical situation where the local community was denied access of wildlife resources, and recommended that the Government facilitates the improvement of access of benefits from wildlife for local communities (Namanha & Abacar, 1993). Although this happened before the drafting of the policy of forest and wildlife, the DNFFB was already taking steps towards involvement of local communities in management of use of natural resources. The report added further conviction for the need to develop a partnership approach to managing the use of resources.

The Government, with support of Ford Foundation started the Tchuma tchato project to involve local communities in management and to enable them to benefit from wildlife resources. The project focused on the following: (i) improve the organizational structure of the local communities to enable them to participate in management of wildlife (ii) identify and support the implementation of activities that the communities would be capable of doing in relation to management of wildlife (iii) identify and implement mechanisms to allow the people to access benefits from wildlife.

As part of the Tchuma tchato implementation process, in 1995 the government issued the first decree (Government of Moçambique, 1995) that allows the communities of Magoé district to be able to access part of the money paid by tourists for sport hunting. The decree also created the opportunity for the communities of Magoé to be allocated a quota for using wildlife for their own consumption. In terms of access to benefits, the decree requires that fees paid by the concessionaire to the government, should be shared as follows: 30% to the local communities; 30% to the district administration of Magoé; and 40% to the central treasury. This distribution was based on the principle that the benefits should be allocated to local institutions and local communities to stimulate their participation in management of wildlife. It accords with the conceptual framework that

indicates government policies and legislation (Fig. 2.1) respond to need and perceptions of the local communities. The model further predicts if successfully implemented, the process should lead to community support.

To implement the activities the communities of Magoé were organized in community councils. The community councils provided an organizational structure through which the communities would be able to implement the identified activities. They are involved in anti-poaching activities, participate in the process of harvest quota setting and have been given the first option for employment in the safari operations. This was a way of establishing a partnership which, according to Motteux (2001), would stimulate dialogue and agreements among previously distant or isolated development units.

Since the implementation of Tchuma tchato the communities have demonstrated collaboration with both government and private sector in management of wildlife resources. This validates the assumption in the model that if policy and legislation accord with reasonable expectations of society, then they will support its implementation. The model (Fig 2.1) depicts an interactive process and does not assume that once support has been achieved it will continue. Recent studies of Tchuma tchato (Namanha, 1999) validate the critical importance of interaction and show two important considerations: expectations and aspirations change; and the partnerships are tenuous and fragile. This exposes the critical importance of government sustaining the development of its staff so that they can cope with these challenges and sustain the partnerships and the progress.

Blanchard SODETUR

In this initiative the Government the private sector and the local communities were to establish a consortium in which each would hold shares. The shares are represented by the contributions of each namely, money from the private sector, and natural resources from Government and local communities.

In 1996 an American private company, Blanchard Enterprises proposed to the Government of Moçambique an investment that would include:

- creation of a Development Society¹¹ named Blanchard SODETUR, in which shares would be held by the State, private sector and local communities;
- allocation of shares in the Development Society were as follows: State (9.66%), Blanchard Enterprises (70%) and the local communities (4,83%), 2,42% for the workers and 13.04 % set aside to involve other Moçambican private sectors that would like to buy shares; and
- implementation was to be in the following way: The State would allocate the land, which was valued 2 million USD. Blanchard Enterprises would have to inject

¹¹ The Development Society is a company that is formed by the State, private sector and local communities for management of Reserves. The private sector is the main promoter of the company, and is the biggest shareholder

14.5 million USD for capital. The local communities would provide their services to align support for the project (antipoaching activities, conservation of resources, cost of not destroying the resources) up to 1 million USD to represent their shares; Blanchard SODETUR would inject 0,5 million in equipment and money to represent the shares of the workers. Finally, the Moçambican private sector would need to invest up to 2.7 million USD to buy the shares allocated to them.

- the Development Society had to develop the concession area incorporating the Maputo Elephant Reserve and adjacent areas, totaling about 236 000ha; and
- The envisaged main activities of the Development Society were the development of eco-tourism activities in the concession area through attracting other investors who would undertake investments up to 800 million USD, restock with wildlife in Maputo Elephant Reserve, and develop social infrastructures such as hospitals schools and water supplies for local communities in areas adjacent to the Reserve.

The Society had a concession for 50 years renewable twice for similar periods. The terms of authorization established investment targets to be fulfilled by Blanchard SODETUR during the first phase (30 months) of the project. The targets were as follows: (i) building tourist infrastructures in Maputo City; (ii) building tourist infrastructures in the concession area, such as a Casino Hotel with capacity for 120 beds, golf course, camping sites, beach camps (iii) introducing wildlife into the concession area; (iv) building of a railway in the project area to connect with the existing one in the Salamanga area; (v) rehabilitation of infrastructure to support community upliftment, such as boreholes, schools, clinics, etc; and (vi) provide direct employment for 1000 people.

The Government of Moçambique decided to cancel the Blanchard SODETUR concession in January 1999 due to weak performance. This was motivated by the fact that the Development Society failed to meet the targets set, and that failure was responsible for detrimental effects to the area (MAP, MICTUR, CPI, 1999). In fact, no infrastructure was built and no investor was in place, the realization of the community share and their representation was unclear, consequently the expectations created in Government and local communities were not met.

The framework (Fig 2.1.) can be used to analyze responses. The policy was developed in response to the needs and perceptions of Government and other stakeholders. When these needs (facilities, infrastructures, tourism, etc) were not met the resulting disillusionment would call the policy into question and lead to declining collaboration. Whilst Government response by canceling the concession might alleviate disillusionment, this would be temporary because the needs still exist. The Government needs to urgently introduce a new concession if policy is not to come under severe and hostile pressure. The framework helps expose the urgency of for action and categorize the nature of the action required.

Development Society of Niassa

The arrangement for this partnership is similar to that of the Maputo Elephant Reserve. In the same year (1996), DNFFB conducted negotiations with a private company, Group Madal¹², to manage and develop the Niassa Game Reserve for a period of 2 years. The agreement included the principle of joint management of the Niassa Reserve between the private company and DNFFB. The agreement required that within the 2 years the company would have to allocate funds for the development of a management plan. This has been fulfilled and the management plan recommended formation of a Development Society, in which the Government, private company and local communities are shareholders.

The government approved the idea of forming the Development Society. However, the Group Madal decided to pull out and create a new company, Niassa Investments, which would from that time, play the role of the private partner in the Development Society. In 1999 the Development Society of Niassa was established and was granted a concession for 10 years renewable for 5 times.

The modality of the company would start with 51 % of the shares being held by government and 49% by Niassa Investments. The shares of the private company would be in the form of money and equipment, and the Government would participate by making available the natural resources. Notable in this approach is that local communities would not immediately be granted shares. This is because they are not users of the Niassa Game Reserve. They have therefore to be brought into arrangement as a human resource which may in time, take over shares from government and Niassa Investments.

The two initial members of the Development Society, are required to reduce their share holding to accommodate other shareholders as follows: Government would decrease the shares to 30%, Niassa Investments would decrease its to 36%, then to 19%. Other investors in accordance with the law, would take shares released, and the communities would have access to up to 15%. The participation of local communities would be through legal institutions that would represent them. As this would take time, no clear deadlines were set for transfer of shares to the stakeholders.

The Development Society is required to implement the following in the Niassa Reserve:

- invest an amount not less than US\$ 3,740,000;
- promote development of communities;
- involve and encourage the local communities in actions of conservation and preservation of the resources of the Reserve, and in the sustainable commercial use of resources;

¹² Group MADAL, is a Moçambican company devoted to coconut plantation and cattle farm. One of the owners decided to inject its own money to Niassa Reserve in behalf of the consortium, Group MADAL

- promote the rehabilitation, building, development and use of infrastructure, and socio-economic activities needed for the improvement of quality of life of local communities;
- define terms and conditions which will be used for the selection of investors to implement conservation activities, as well as establishing the rules and procedures for the tender. The terms of authorization established that in principle, only companies with more than 25% of the shares being held by Moçambican citizens, or Moçambican enterprises can participate in tenders;
- develop tourist infrastructures and implement the conservation activities; and
- the company should have a contract with the DNFFB.

Despite the three experiences in partnership, in Tete, Maputo and Niassa, there are still no clear guidelines set for the process of establishment of consortiums/partnerships participating in management and development of protected areas and other wildlife areas. The experiences were characterized by insignificant participation of local communities. In fact, the societies were negotiated between Government and the private sector, who decided what to give to local communities, and when to do so. The private sector had a significant advantage in the negotiation as its shares are in money which Government did not have, and certainly wanted to make an advantageous deal. Also, Government was weakened by not having clear criteria and mechanisms for such negotiations. Use of a framework such as that developed for this research have exposed the critical consequences of failure and thereby have encouraged a more pragmatic and controlled process.

Although it was noted that there were positive perceptions in the communities about Tchuma tchato, which may have been caused by quick delivery of benefits, it still remains a question if government is giving the community a fair deal and is offering sufficient assistance for the control of people coming across the border to harvest fish (Namanha 2000).

The framework (Fig 2.1.) indicates that even if policy is considered acceptable, poor implementation leads to growing hostility. As perceptions change with hostility the assumption is that it will lead to a breakdown in management of use of resources and ultimately unsustainable use. Once these links are made explicit, as they are in a framework, they are less likely to be ignored or not taken seriously.

This analysis demonstrates that the DNFFB still has deficiencies that limit effective establishment of partnerships in accordance with the intentions of its policy. Since Government does not have adequate financial resources, the partnerships are financially dependent on injection of funds from the private sector. Consequently, a failure of the private sector leads to the failure of the partnership arrangement, and as it is government who established policy and promotes its implementation, it is government that is seen to have failed. The case of failure of the Blanchard SODETUR project particularly reflects

that the partnership is critically dependent on the private sector. Requiring an investment to establish the partnership might help ensure that there is at least some benefit even if partnerships fails. It is important that measures are taken to reduce the effects of failures. If there is only one partner responsible for financial injection, failure to do so leads to situation in which the entire initiative of partnership fails resulting in dissatisfaction of stakeholders and perceptions that the policy is not good. To prevent such situation, the

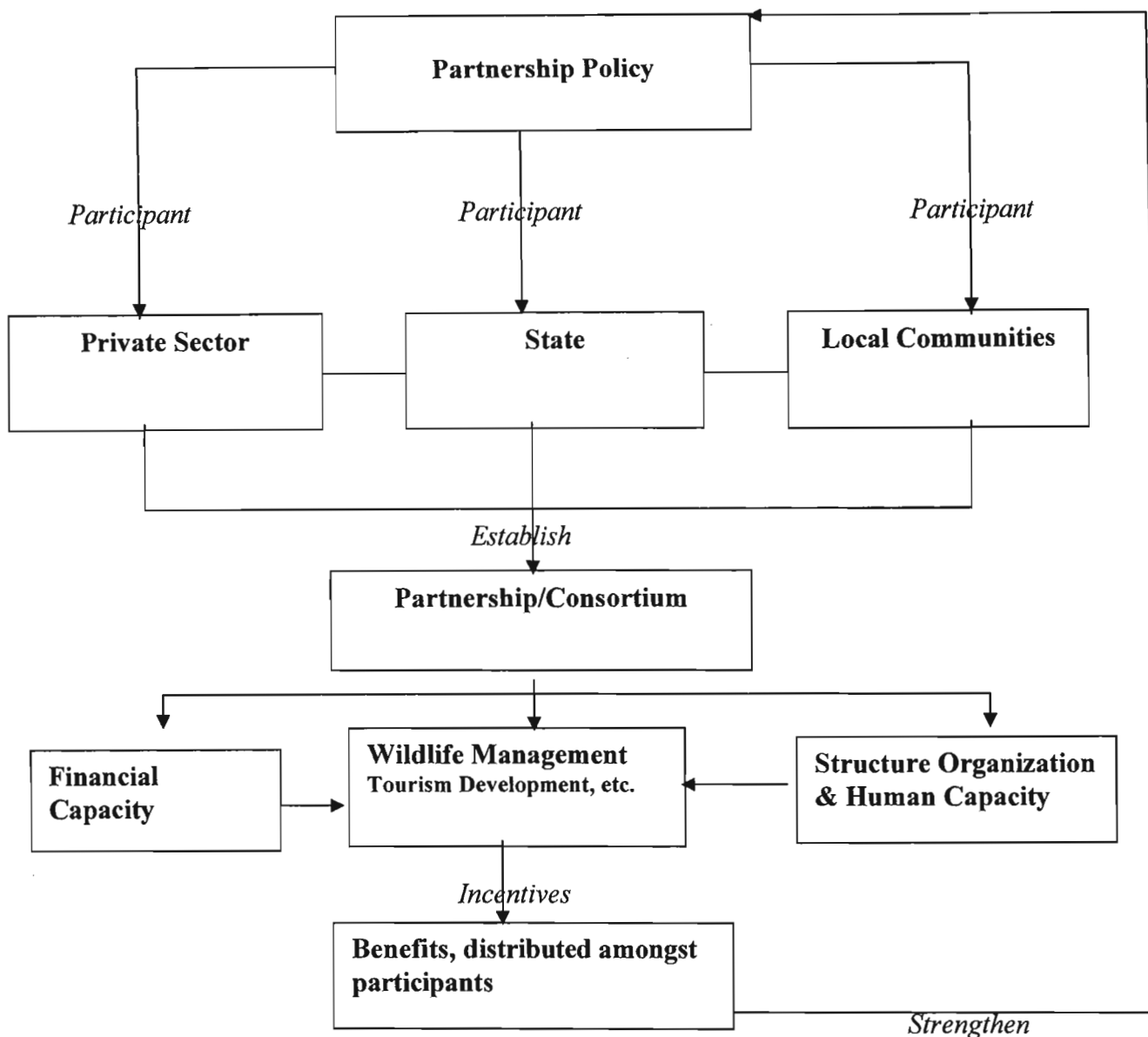


Figure 5.2. Scheme showing the dynamics of the partnership between government, private and local communities. Reference should also be made to the conceptual framework (Fig 2.1) to understand the relations between benefits and policy.

Government may consider the option of starting with development of a management plan. This document could be used as an instrument to bring diversified partners to enter various partnerships, that are part of the implementation of the management plan. This option may give more chances of guaranteeing that one failure will not mean the failure of entire partnership initiative, as there are more chances of having some success among the different partnerships entered. Furthermore, each success story will play a role in the perceptions of people by demonstrating that the policy is good, even though some partners may fail. New investors may also be solicited to replace these failed partners. If each partnership is relatively small then replacements may be easier to secure than if they were large. The framework directs attention to the critical importance of stakeholders' perceptions, so in addition, the commitment of government should be that the revenues accruing are prioritized to be used to stimulate community projects where possible, to guarantee that there is a flow of benefits to these partners.

Clear guidelines for the formation of partnerships need to be developed. Once this is done, a first priority is that all stakeholders need to be clear about their roles, responsibilities and ability to perform. All partners have to understand that because the system is complex and highly networked (as shown in the framework) success and failure have implications far beyond their particular role and even that of partnership.

DNFFB through the TFCA project is developing guidelines that will be used in selecting private sector investors in protected wildlife areas (DNFFB, 2000). These guidelines should stipulate in detail the roles, responsibilities and expertise requirements of each partner as well as the process of establishing and sustaining the partnership. It is hoped that by using these guidelines, committed, capable investors will be selected and the partnership arrangements will be effective in managing wildlife resources in Moçambique.

This analysis indicates that whilst government may have a policy that is informed by global, regional and local wisdom and should therefore have the support of the stakeholders, it has experienced considerable difficulties with implementation, to the extent that hostility to policy may arise. The next Chapter considers perceptions of communities in two locations: The Maputo Elephant Reserve, where people have experienced the attempt of government to set up a very ambitious initiative; and the Chimanimani where the community has been largely isolated and who therefore, would provide an interpretation of policy and implementation unaffected by the failure to meet expectations

Chapter 6

Community Participation

6.1 Introduction

This chapter provides an interpretation of the responses of the 60 respondents from each of Maputo Elephant Reserve (MER) and Chimanimani. The interpretation addresses all levels of the conceptual framework depicting the processes driving policy formulation and development (Fig 2.1). It starts with interpretation of level of education, profession, gender and the perceptions of resources base, their types of needs and pressures on the resources. This information provides a context that allows understanding of the perceptions people have of the resources they use in relation to existing policies and implementation.

6.2. Interviewee profile

It is reasonable to expect that the perceptions local people have of policy, the natural resources base and the manner in which it is used, will be directly linked with the level of education, types of profession and whether they were born and have lived in the area for any length of time. Gender is particularly important; men and women, play different roles in the household economy, thus affecting the perception each has of the natural resources. Gender is particularly relevant in situations such as the MER and Chimanimani where the resource base is central to survival.

Maputo Elephant Reserve

The majority of respondents (63 %) are fishermen with linkages to market centers (Table 6.1). Since only 15% of the respondents were born elsewhere (Table 6.4) it is obvious that most of the fishermen are local people. The Maputo Elephant Reserve incorporates several coastal lakes (Fig 1.2), which are rich fishery resources.

Of the 60 people interviewed at MER only one person was formally employed (as a game guard) while 15 people were unemployed or working at home and 44 people were self employed (Table 6.1). Since the majority (85%) of respondents said they did not have any education (Table 6.5), this is a contributing factor to the low level of formal employment. From the 8 women interviewed, 7 said they worked in their homestead and none claimed other activities, including agriculture. These results should be interpreted with caution because 85% respondents were men (Table 6.3).

Chimanimani.

Regarding the occupations of the interviewees (Table 6.2), it was found that 89 % practice farming. Sangomas, traditional leader and game guards were represented by 3% each. There was one shop owner. Because Chimanimani is incorporated in a transfrontier conservation area project, that can affect current activities, the identification of main

source of income of people helps understanding of their reactions to the policy for forest and wildlife.

Table 6.1 Occupation of the people interviewed in MER (n= 60)

Profession	Number	Percentage	Observations
Fisherman	38	63	4 of interviewed have a parallel profession that are respectively, agriculture, craftsman, charcoal maker, game guard
Sangomas	2	3	1 of them also do agriculture
Craftsman	1	2	
Plumber	1	2	
Game guard	1	2	
Domestic (woman doing housework)	8	13	
Agriculture	2	3	
Retired	1	2	Retired from mines in SA
Unemployed	6	10	
Total	60	100	

Table 6.2 Occupation of the people interviewed in Chimanimani (n = 60)

Profession	Number	Percentage
Agriculture	53	89
Sangomas	2	3
Traditional leaders	2	3
Shop owner	1	2
Game guard	2	3
Total	60	100

Table 6.3 Gender composition of the interviewees (n = 60 in MER and n= 60 in Chimanimani)

Gender	MER	Chimanimani
Male	85%	92%
Female	15%	8%

Table 6.4 Locality of birth of each interviewed (n = 60 in MER and n= 60 in Chimanimani)

	MER	Chimanimani	Observation
Born in the research area	85%*	100%	The areas are Gala, Liunde and Mavukuza
Born outside the research	15%*	0%	People were from

area			provinces of Maputo, Inhambane, Sofala and Niassa
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Table 6.5 Level of education of persons interviewed (n = 60 in MER and n= 60 in Chimanimani)

	MER	Chimanimani
Elementary Education	15%	3%
No Education	85%	97%

There were more men (92%) respondents than women (8%) (Table 6.3). In the Chimanimani area the man is the head of family, only in his absence can the woman take the lead in household affairs. All respondents were born in the research area (Table 6.4). Only 3% had some elementary education (primary school) and 97% were illiterate and had never been to school (Table 6.5). This informs us that the area is marginalised from the mainstreams western influences and that the people may still be strongly adhering to traditional practices in management of natural resources.

6.3. Natural Resource Utilisation

The findings set out in Tables 6.1 and 6.2 show a high predominance of people who either do not have employment or are self-employed. Those who are self-employed are dependent in one way or another on natural resources. Their use of resources are varied, e.g. fishermen, who are the predominant in the MER area and others (e.g. sangomas) who draw on a large variety of natural resources. It is likely that most families derive some benefits from local resources. It is consequently important to establish perceptions local people have of their resource base, particularly its abundance and use. Perceptions are considered to be a primary factor in determining how people respond to policy and regulatory structures (see Fig.2.1)

Maputo Elephant Reserve

On considerations of the abundance of the wildlife resources in the past ten years, the respondents were divided with 47% saying that it was high and 42% having the perception that it was low (Table 6.6). However, the perceptions of the abundance of wildlife resources in the present 58% said they are abundant and only 30% said that the abundance is low. A small proportion claimed not to know anything about the level of abundance of the resource base. People said they suffer damage to their crops, mostly by elephant, and this may have led to the perception that there is abundance of animals.

The majority of respondents (82%) claimed to use wildlife resources for food, while about 37% also use it for commercial purposes (Table 6.7). However, it was evident from the group interviews that those who referred to using wildlife for commercial purposes were referring to selling fish locally and across the border into South Africa. Wildlife also has cultural significance to the people residing in the Maputo Elephant Reserve. This is evident mainly through use for sacred reasons, which were mentioned by 18% of the

respondents. Use of forest and wildlife for medicinal purposes was also indicated by 32% of the respondents.

Table 6.6 Local communities perception of resources base in their area

	<i>MER (% responses) n= 60</i>			<i>Chimanimani (% responses) n=60</i>		
	<i>High</i>	<i>Low</i>	<i>Don't know</i>	<i>High</i>	<i>Lo w</i>	<i>Don't know</i>
How abundant were the wildlife resources in your area the past (ten years ago)?	47	42	11	84	9	7
How are they now?	58	30	12	82	9	9

Table 6.7 Natural resources utilization

Questions	MER (% responses) n=60		Chimanimani (% responses) n= 60	
	Yes	No	Yes	No
Does wildlife have cultural significance for you, or your family?	63	37	68	32
Do you use wildlife for:				
• Food?	82	18	73	27
• Medicine?	32	68	45	55
• Cultutal/Sacred reasons?	18	82	70	30
• Commercial purpose?	37	63	8	92

Chimanimani

Regarding the abundance of the resource base in the past ten years, most respondents reported that the wildlife resource base was high in the past and is also high at present (respectively 84% and 82% of respondents, Table 6.6). This is suggests that they consider the area as stable source of resources. Only a small proportion did not know anything about the status of the resource base, and how it may have changed (respectively 7% and 9%). Chimanimani is an area with little access for outsiders and the demand for these resources is predominantly local and may not be detrimental to the numbers of animals. This could explain why people perceive that wildlife populations are stable.

A majority of people (68%) indicated that the wildlife has cultural significance to them and their families (Table 6.7). When asked about their use of wildlife 73% indicated that they use wildlife as source of food. A majority (70%) indicated that the forest and wildlife have sacred values and a considerable proportion of respondents said that wildlife could be used as medicine (45%). The wildlife is not strongly linked to commercial activities, as only 8% of the respondents claimed this. The wildlife resources

represent an important part of the livelihoods of the Chimanimani respondents, particularly having limited access to education and the external economy.

6.4 Awareness about the Forest and Wildlife Policy and Legislation

There are fundamental differences between the history of the Maputo Elephant Reserve and the Chimanimani in regard to the legal status of the natural resources. The MER has a history of a hunting area followed by a proclamation of a Reserve, while the Chimanimani has never had any legal status relating to hunting or protection. Consequently one would expect different perceptions of the policy.

The background of people living in these areas may influence the different interpretation of the activities being currently implemented. One might expect different attitudes towards the policy, reinforced by the fact that Chimanimani is more isolated than MER, and because all respondents were born in the area and the majority (97%) have no education at all.

The people in MER have a commercial fishery as a main activity while the Chimanimani people use other natural resources and have less commercial activities. All these factors play a part in determining the socio-economic and political context which shapes perceptions of policy initiatives and introduction of regulatory mechanisms.

Maputo Elephant Reserve

The majority of people interviewed (60%) reported that they were not familiar with the forest and wildlife policy and many (67%) also felt that both the policy and its associated legislation do not adequately confer resource user rights to the communities (Table 6.8). As hunting within the Reserve is not allowed, it was further identified that they may have interpreted policy and legislation as conferring user rights to communities through the acquisition of licenses for hunting and/or fishing. Only 27% of the respondents confirmed that they were consulted during the formulation of the forest and wildlife policy and legislation mainly through interviews and attendance of meetings that were convened by government officials and non-governmental organisations (NGOs), at which some policy issues were debated (Table 6.8). This may have been caused by a bad mobilization system adopted by Government as homesteads are widely separated and it is difficult to assemble residents, or because NGOs who could have assisted were not operational in the area.

Some (35%) of the respondents were aware of the Government's effort to involve them in the management of natural resources, through Community Based Natural Resource Management (CBNRM) programs. Only 12% felt that they were involved in the management of natural resources. One is currently a game guard and others were employees of the Maputo Elephant Reserve in the past. The majority (55%) believed that the government is not fully committed to devolve rights over the management and use of natural resources to local communities, while 12% declared to not know about government's commitment (Table 6.8). This perception may be caused by two main

reasons: The policy Government is implementing is that the natural resources are State property, therefore the resources are not owned by the communities although there are expected to be custodian; the area where they live is proclaimed as Reserve, which implies no use, while the people are dependent on natural resources. Therefore the doubt people have about the policy and regulatory framework is justifiable.

When community members were asked to list the issues over which they wish to have more devolution effect, 42% said that want more rights to hunt wild animals and to fish, 38% said that wanted the right to deal with problem animal control, 19% said that wanted tangible socio-economic development in their areas, and 1% wanted to get rights to log timber (Table 6.8). More than half (53%) of the people interviewed lacked knowledge of CBNRM programs. For those that have heard about them, 47% referred to the CBNRM program in the neighboring KwaZulu Natal, South Africa (Table 6.8). Wildlife and fisheries are demonstrated as the resources most demanded by the respondents, which are regarded as denied by Government yet at same time, the answers given in regard to their knowledge about CBNRM demonstrates that the Government activities have not reached them and if it is known it is learnt from outside Moçambique. This can be interpreted as failure to implement policy, or implementation of policies that bring hardships. Both may trigger stakeholder hostility to Government and lead to degradation of the resources base due to over-utilisation.

Chimanimani

The majority of respondents (84%) indicated that they are familiar with the policy and legislation (Table 6.8). Eighty eight percent of those interviewed claim that the legislation confers adequate resource user rights to local communities and only 3% indicated that the law does not confer adequate resources user rights to communities. Some people (32%) confirmed that they abide by legislation by requesting licenses when they wish to utilize the wildlife, while 58% said that they do not. This latter response may reflect the difficulties experienced by rural people going to a Government department to request licenses due to long distance and lack of cash to pay the license. The perception that the wildlife is a free good may also be a factor as there has never been strong law enforcement in the area. This indicates that there are inadequate mechanisms to support the legislation.

Only 14% of the people felt they were consulted during the policy and legislation formulation phase, mainly through interviews and attendance of meetings that were convened by Government officials and non-governmental Organisations (NGOs), at which some policy issues were debated, while 47% did not feel involved in the process and 39% simply said that they do not know. In fact the TFCA project was launched after the formulation of policy was finalized and in reality the people of Chimanimani were not consulted at all. The 14% claiming they were consulted in policy formulation may have been thinking of the process of awareness and consultation that took place for implementation of TFCA. Interviewees in Chimanimani showed overall, that they support for the policy regarding community participation in management of natural resources and that 89% of the respondents indicated awareness of Government efforts to

involve local communities in forest and wildlife management as well as the facilitation of access to the benefits accruing from resources management. This shows that the TFCA implementation is helping inform these people of Government policy.

Table 6.8 Policy Legislation Awareness

Questions	MER (% responses) n=60			Chimanimani (% responses) n=60		
	Yes	No	Don't know¹³	Yes	No	Don't know
Are you familiar with the extant forest and wildlife policy?	35	60	5	84	12	4
Do you think the forest & wildlife policy & legislation's confers adequate resource user rights to communities?	23	67	10	80	3	9
Do you refer to, and abide by the legislation when you utilise wildlife?	62	18	20	32	58	10
Were you consulted during the formulation of the extant forest & wildlife policy and its associated legislation?	27	50	23	14	47	39
Are you aware of Government's efforts to involve communities in forest and wildlife management and tangibly benefit from them?	35	38	17	89	9	2
Are you currently involved in any forest and wildlife management?	12	76	12	73	25	2
Do you think the Government is fully committed to devolve rights for natural resource ownership and use to local communities?	33	55	12	75	5	20
List the issues were you would like to see more devolution effect						
• Hunting and fishing	42	-	-	-	-	-
• Deal with problem animal	38	-	-	-	-	-
• Other benefits (social)	19	-	-	39	-	-
• Timber logging	1	-	-	-	-	-
• More access to resource use	-	-	-	20	-	-
• Do not know	-	-	-	41	-	-
Are you aware of CBNRM programmes?	47	53	0	80	20	0

¹³ The questionnaire did not consider this answer when conceived. However there were people who did not answer some of the questions or said they did not know. Therefore the researcher opted to include a column with the answer "do not know"

Most of people (73%) interviewed feel involved in the process of forest and wildlife management, with only 25% not confirming this. Regarding the issue of Government intention to devolve rights to local communities, 75% of people felt that the Government is seriously committed to do so while 5% still do not feel that the Government is committed in to devolve rights. A considerable proportion did not know (20%). These responses indicate progress with implementing the Government policy regarding forest and wildlife.

When community members were asked to list the issues over which they wish to have more devolution of control, 39% said that would like to have other social benefits such as schools and hospitals, 20% said that wanted the have more devolution of rights to access the wildlife resources and 41% did not offer an opinion. The responses suggest that respondents are not clear on the concept of devolution as they either confuse this with the concept of needs, or perhaps their needs for social services are so acutely felt that they take whatever opportunity avails to raise their needs. The response indicating preference for more devolution of rights of accesses to wildlife may have to do with licensing, since some residents do not obtain licenses for use. It could also reflect a sense of not being able to harvest sufficient for their needs. It is evident however, that policy intentions are not clearly understood.

Regarding the level of awareness about the CBNRM programs, the majority of respondents (80%) claimed to be aware and only 20% were not aware. For those who claimed to be aware they referred to the current TFCA project and to the CAMPFIRE program in neighboring Zimbabwe. Awareness of CAMPFIRE in Zimbabwe may provide a platform on which to build understanding of CBNRM locally. However, it seems that the connection between CBNRM and provision of social services is stronger than its connection with wildlife conservation and management. This suggests that interpretations of support for CBNRM can be exaggerated if insight into communities' precise understanding of CBNRM is not established.

6.5 Local community organisations and capacity to manage natural resources

Sustainable use of natural resources requires an appropriate organization and effective management (Hockings, 2003). Traditionally in Africa there are institutions that managed use of natural resources; Western influences and economies have weakened traditional institutions. In Southern Africa and in Moçambique, there are several CBNRM programs that aim to support the institutional organizations of communities providing access to natural resources as well as to benefits accruing from their utilization. The intention has been to strengthen local level institution in preparation for devolution of responsibilities for managing use of resources.

The policy of forest and wildlife promotes CBNRM and community participation in management and benefiting of resources. However, this would need a process of community organization, and establishment of clear mechanisms to implement the policy intents. Since government has been promoting CBNRM in both Maputo Elephant Reserve and Chimanimani, this section seeks to assess local capacity.

Maputo Elephant Reserve

The majority of people (58%) indicated that they do not know if the Traditional Authorities regulate the use of wildlife, while 36% of them think that they do not (Table 6.9). Only a small proportion (6%) believes that the Traditional Authorities regulate the use of wildlife. Therefore 50% of the respondents do not know if the Traditional Authorities establish harvesting quotas, while 47% think that they do not. When asked if the Traditional Authorities respect their individual rights over the wildlife resources, the respondents were divided, with 37% saying that they do and 37% saying that they do not. Twenty three percent said that they did not know. There is an apparent contradiction in these responses. This is evident in the responses indicating that Traditional Authorities “respect rights” (37%) yet only 6% believe that Traditional Authorities regulate use. What might underlie these responses is the ineffectiveness of Traditional Authorities in regulating use as it was shown on Chapter two that this area has experienced many disruptions.

The majority of respondents (96%) agreed with the principle of sustainable utilization. When they were asked how community organizations were established, 2 % of them said that they were elected and the majority representing 98% said that did not know. In fact a small proportion of people recognized existence of community organization. Helvetas is working with the people, but during the research period there was no community organization although meetings with community members have occurred. These meetings may be perceived by some people as a community organization. The previous political system has created “Grupos Dinamizadores” (groups of people who were doing the political mobilization) who had the responsibility of leading the people in any affairs in the area and they may have contributed to the confusion.

Fifty percent of respondents felt that they have the capacity to implement CBNRM programs. Only 35% of the respondents expressed the need for a code of conduct to regulate the use of wildlife, while 50% of them said no and the rest, (15%), did not know.

Chimanimani

People were always equally divided between those (43%) who indicated that they do not know if the Traditional Authorities regulate the use of wildlife and those (38%) said that they do regulate the use of wildlife. The remainder (19%) said that they do not know. When were asked if the Traditional Authorities establish harvesting quotas a minimal number of respondents (2%) claimed that the Traditional Authorities establish quotas, and 8% said they did not. The majority of the respondents (80%) simply said that they do not know. Although the traditional leaderships seem to be stronger than Maputo, it does not appear to have a dominating role in regulating the use of wildlife resources.

When asked if the Traditional Authorities respect their rights over the wildlife resources, the majority (68%) of respondents said yes, with only 10% saying that the traditional authorities do not respect their rights. Twenty two percent of respondents did not know.

As with the Maputo Elephant Reserve, more respondents (68%) claim that Traditional Authorities respect rights of use whilst only 38% claims that they regulate use.

Regarding the question of agreement with the principle of sustainable utilisation of wildlife, the majority of interviewees (88%) agreed with the principle of sustainable utilisation, while 10% said that they did not know and 2% did not agree with the principle.

Sixty four percent of the interviewees confirmed that there are organisations that would guide the CBNRM program in their area, while 21% do not acknowledge the existence of such organisations. Fifteen percent claimed that they did not know. When asked about how lead members were selected to establish the community organisations, 56% said that members were elected, 2% said that they used the traditional authority, 4% said that they elected the traditional authorities to be lead members of community organisation and 38% did not know. This is recognition that the TFCA program had initiated a number of activities including the organization of communities. This is part of the implementation of the policy regarding the participation of local communities in management of natural resources. The majority of people (86%) think that the local communities have capacity to implement a CBNRM program, although they recognize that they need further capacity building. Fourteen percent of the respondents did not know.

Seventy percent of the respondents indicated that they think that there is a need to have a code of conduct to regulate the use of wildlife. However, 4% indicated the contrary, and 26 percent said did not know.

Table 6.9 Local community organisations and capacity to manage natural resources

Questions	MER (%)			Chimanimani (%)		
	Yes	No	Don't know	Yes	No	Don't know
Does your traditional authority regulate the use of wildlife?	6	36	58	38	19	43
Do the traditional authorities establish harvesting quotas?	3	47	50	2	18	80
Do you think that your rights over wildlife are respected by the traditional authority?	37	37	23	68	10	22
Do you agree with the principle of sustainable utilization of wildlife?	96	2	2	88	2	10
Is there any local community organisation that would guide CBNRM programs in your area?	2	80	18	64	21	15
How lead members were selected for establishment of community organisation?						
• Elected	2	-	-	56	-	-
• Traditional authority	-	-	-	2	-	-
• Traditional authority confirmed by election	-	-	-	4	-	-
• Don't know	98	-	-	38	-	-
Do you think communities have capacity to implement CBNRM programmes?	49	47	2	86	0	14
Do communities need a code of conduct to regulate use of wildlife?	35	50	15	70	4	26

Chapter 7

Discussion and Conclusions

7.1 Introduction

The Moçambique government is setting out to create an organization through which it will be possible to promote effective management of protected areas. Drucker (1995) observes that “every organization, whether a business or not, has a theory of business”. The foundations for a theory of business are the assumptions about the environment within which the organization operates, the mission and co-competencies. When the assumptions fit reality, prospects for success are enhanced.

Mental models are useful tools for making implicit assumptions explicit (Senge, 1990) and the model developed for the study (Fig. 2.1) exposes some important assumptions about the operating environment, the mission and the core-competencies. The purpose of this chapter is to discuss how well the assumptions fit reality and to suggest areas for improvement.

7.2 Stakeholders's Capacity

Policies are essentially statements of intent. Because they are constructed to direct behaviour in ways that promote attainment of a future desired state, it does not follow automatically that the capacity exists within the executing organisation to act effectively in promoting the policy. When policies are revised, as has been the case with wildlife policies in Moçambique, the assumption is made that the organisation either has the capacity, or will acquire the capacity to implement the policy effectively. For the purposes of this study, two determinants of capacity were considered, staff complement, and staff empowerment.

The findings show clearly that the Government does not have the staff complement to effectively address the intentions of policy, and the basic assumption was therefore, not valid. It was shown that the intention of policy is to devolve responsibility and aspects of resource management by promoting co-management through various forms of partnership. An underlying assumption is that by doing this it will be able to effectively attain policy objectives with a smaller staff complement than would be the case without partnerships. This assumption is also shown to be invalid. It becomes clear from the findings that most of the attempts to form partnerships have failed and, as a result there has been no meaningful improvement in the complement of people involved with implementation. There are some situations where one could argue that the staffing situation has improved, but these (e.g. Tchuma tchato) seem to be operated from grants made by foundations and are not based on partnerships as envisaged in the policy. The findings suggest a critical shortage of professional staff.

There is also evidence that the consultations at both study sites, Maputo Elephant Reserve and Chimanimani, have failed to develop the partnerships that are necessary to bring about the level of self-regulation by the local people that is required for achievement of the intentions of policy. The assumption that such partnerships would bring about more

community action in respect of control over illegal activities is shown to be invalid. There is reasonable justification for interpreting this as being caused, at least in part, by a deficient process implemented by Government. Causal factors are considered to be the availability of staff to engage the process, and the extent to which they are empowered to perform the required tasks. Government has assumed that personnel are appropriately empowered.

Cook (1995) has developed a framework that assists in evaluation of empowerment. His 'development cube' model identifies three dimensions of empowerment. To be effective an individual must have the self-confidence necessary to engage the process (subjective power); there must also be opportunity to engage the process (objective power); and the individual must also have the required skills (competency).

The intentions of the wildlife policy are that staff, communities and other partners should have opportunity to engage each other (objective power). Whilst the evidence shows that this has occurred, it has not been as successful as hoped. Explanation is to be found, in part, in the staff complement of Government, members of which are expected to take the lead and sustain the fledgling process. It is shown above that the staff complement may be too small to provide the dedicated support that is required. This suggests that staff do not have enough regular contact, enough opportunity, to be able to sustain the process.

It could be argued that staff who felt confident, who had subjective power, would create opportunities for engagement. Conversely, one might reasonably anticipate that if employees were not confident with their ability to perform the required tasks, they would allocate their time to activities for which they had greater confidence. The findings show clearly that professional personnel are not well qualified for the demands made on them by the policy. Particularly, they are not well qualified to engage what is essentially a social and business process. An additional contributing factor is that a high proportion of professional staff is not qualified in matters relating to the management of protected areas. This deficiency in competencies might also contribute to a sense of inadequacy, and a reluctance to engage the central issues of policy implementation with the enthusiasm and commitment that is hoped for.

Moçambique, like most African countries, is characterised by rural poverty. Not surprisingly therefore, in both locations studied in this research local people are shown to have been marginalised from the mainstream economy and have low levels of empowerment. Whilst the intentions and actions of Government were to empower local people to participate as co-management partners, the process followed was not effective in achieving this. Local people were shown to have little understanding of the intentions of Government and most said they had few opportunities to engage the process (i.e. little objective empowerment). Levels of education and competence to engage the process were low and although not measured directly, the impression gained was that both of these contribute to low levels of self-confidence (subjective power) that serves to weaken them further in the process of constructing meaningful partnerships. It is evident that Government, by assuming that it had the capacity and resources to engage effectively with local people when it did not, may have inadvertently disempowered rather than

empowered some members of the local communities. It is also clear that Government did not fully appreciate the demands that would be made of it in building partnerships, and underestimated the complexity and scope of empowerment.

The findings show that the Government organisation charged with conservation is operating in an environment that requires a capacity it does not currently have. Whilst its mission promotes co-management in ways that should alleviate capacity constraints, it does not seem to have enough 'in house' capacity with appropriate competencies, to move it quickly to a situation in which partner capacity contributes meaningfully to management. Community members express dissatisfaction with the slow pace of improvement in their quality of life, and this creates further tension reducing self-confidence and the frequency of engagement. The consequences of failed attempts to establish partnerships that bring real benefit to local people were evident in the interviews, particularly at the Maputo Elephant Reserve. Here there is evidence that local people are taking up positions that counter the intentions of the Reserve. As confrontational positions are taken up the task of constructing partnerships is made more difficult. The risks attached to engaging a complex process without sufficient resources are not only that it may fail, but also that it may lead to conditions that reduce prospects for success in the future.

7.3 Financial Resources

Availability of financial resources to support policy implementation is a key determinant of success. Government clearly recognises this and its policy is founded on the assumption that by promoting partnerships in which equity is shared, investment capital will be drawn into conservation. In this way infrastructure and services (inside and outside protected areas) can be leveraged, improving social welfare and creating economic opportunities. Improvement of the livelihoods of local people is perceived as the incentive for creating a willingness to collaborate, thereby promoting participation and self-regulation.

Partnerships have been difficult to establish. It appears that in the case of Blanchard SODETUR, the theory of business was founded on an assumption that the location and properties of the Maputo Elephant Reserve would attract substantial private investment from abroad. The success of the intended partnership was critically dependent on the validity of this assumption. As it turned out, the intended investment did not materialise and the requirements of the partnership agreement could not be met.

It was beyond the scope of this research to determine whether Government was sufficiently empowered to evaluate the assumptions being made by Blanchard SODETUR. Application of mental modeling, such as the one developed for this research (Fig. 2.1), might have helped expose the assumptions and indicate those that required critical evaluation before entering into the partnership agreement.

The Government also made the assumption that the finance necessary for address social welfare would come from the private sector partners. This led to a sense that it was not

necessary to actively source funds from other sources. Clearly with no alternate sources of finance, failure of the partnership led to failure of delivery on expectations of social services that were created by dialogue around the partnership. As could be predicted from the framework (Fig.2.1), this disillusionment leads to a hardening of attitudes as are evident in the responses from people in the Maputo Elephant Reserve. By contrast, at Chimanimani where some social welfare improvement has been experienced attitudes are more positive.

It is clear from the study that the business of achieving a participatory form of conservation management is complex and multidimensional. It is as much a social process as it is a conservation or financial process. Failure to acknowledge this leads to an illusion of simplicity and an unfounded sense of control.

Three points emerge from this discussion:

The conceptual framework (Fig 2.1) postulates that policy formulation and implementation is a continuous interactive process between the government and civil society. To enable a process of participatory resources management, there should be a focus on building, transforming and strengthening community organisation and institutions. This requires identifying local institutions and organisations and analysing how these relate to natural resources management (Leach, Mearns and Scoones 1997, in Allister, 1999). If this approach is taken, it will lead to support of the policy, as it will allow achieving the sense of ownership that is fundamental in securing agreement of the stakeholders in resources management. Therefore the policy has to be such that its application is adapted to socio economic situations and to types of demands over the resources by users, as well as to their perceptions of the resource system and how it operates.

The perceptions of local communities vary from Maputo Elephant Reserve to Chimanimani. The policy is the same and the areas are under the same TFCA project, what differs and influences the perceptions of local communities is the government capacity and assumptions on implementation the policy. The weak capacity is allied with exploitation of resources, caused by local dynamic economies that are different. Perceptions of the people of Maputo Elephant Reserve are that the policy and its implementation are not good resulting in a lack of collaboration in management of resources. In Chimanimani the perception is that the policy and implementation are adequate, resulting in collaboration.

In regard to the conceptual framework Government perceptions have not taken into account some complexities (financial, technical capacity, the state of system) and have taken for granted implementation of the policy of forest and wildlife in Maputo Elephant Reserve. The state of the system in MER showed that the people were not supportive of the Reserve and Government was not able to review the policy in order to meet the demands, particularly those encountered in the Maputo Elephant Reserve as well. It was also not able to take necessary actions to strengthen the capacity of its implementation, by adapting its institutional and financial capacity to the implementation demands of the MER. These were the main causes of hostility to the policy and process of implementation.

7.4 The usefulness of a conceptual framework

Conservation is in a period of transition, which is being driven primarily by increasing needs of greater effectiveness. These changes are touching many areas of management ranging from theory and management process, to the structure and function of institutions and relationship between managers and researchers. The move is away from reactive, “fly by the seat of your pants” management based on outdated knowledge and understanding of nature and society towards a proactive, strategic approach to management (Rogers and Bestbier 1997). Conservation takes place in perhaps, some of the most complex systems that are influenced by various factors. There are social factors like culture, demographic and family structures, and religion. There are political factors like type of government and the willingness of national governments to address local problems. There are economic factors like cash needs employment opportunities, exchange rates, and markets. There are institutional factors like the strengthening leadership in organizations and the ability of teams to get together (Salasfsky *et al.* 2001).

Taking this into account, it is useful after assessing the policy of forest and wildlife in regard to the conceptual framework, to discuss the usefulness of a conceptual framework, and how such an instrument can help in the process of designing a policy and successfully implementing in order to achieve sustainability in use of resources.

7.5 Getting a common understanding on the objectives of resources management

Engaging people around deep questions of purpose and strategy is fraught with challenges because it opens the door to a traditionally closed inner sanctum of top management (Senge 1999). It is an expectation of many societies that all “interested and affected parties” should be included in protected area management. This has come through increasing democratization, freedom of access to information and increased accountability. It has shaped the main values and principles guiding participatory planning and management of natural resources to expressed as:

- Recognizing different values, interests and concerns involved in managing a territory or set of natural resources, both outside the local communities and within them
- Being open to various types of natural resource management entitlements beyond the ones legally recognized (such as private property or Government mandate)
- Seeking transparency and equity in natural resource management
- Allowing the civil society to assume even more important roles and responsibilities
- Harnessing the complementarity of the capacities and comparative advantages of different institutional actors

- Linking entitlements and responsibilities in the natural resource management context
- Appreciating that the process is more important than the short-term products
- Learning-by-doing through on going revisions and improvements in natural resources management (Borrini-Feyerabend undated)

The stakeholders would need to develop a shared vision, by sharing a future picture of the environment and social, economic and political outcomes in it, usually looking ahead about 10 years. The shared vision should bind to all actors in a common purpose (INR 2000d in Cohen 2001).

7.6 The role of a conceptual framework as a model to address policy design

A conceptual framework for development of a policy helps to establish a logic and pragmatic thinking for designing of a policy. As indicated on Chapter 2, the theoretical construct was elaborated as a contribution to guide the process of designing and reformulating a policy. The construct has the assumption that stakeholders will be participating in the process. Another assumption is that the design and reformulation of policy is a process that takes time, as it requires full participation of stakeholders. A policy should be an evolving instrument that will be used for management of resources, therefore the policy has to be made adequate to specific socio economic, ecological and cultural conditions whilst being flexible to accommodate change.

As it has been assumed that collaboration in designing, reformulating decision making and the process of implementation plays a big role in policy revision, it would be informative to evaluate in this thesis the possible contribution of the conceptual framework in relation to key issues related with collaboration in management of natural resources namely (adapted from Wondolleck and Yaffe, 2000):

- (i) building understanding,
- (ii) getting the work done
- (iii) supporting institutions and
- (iv) monitoring and feed back.

Building understanding

Wondolleck and Yaffe (2000) argue that in the past public agencies and individual landowners controlled much of the information needed to manage their land but today information is ubiquitous. Specialized information lies with different stakeholders, such as private sector, non-governmental organizations, and local communities. Most partnerships seek to promote sharing information among partners via formal or informal arrangements.

One of the principles for building a partnership is the understanding between the partners. The framework seeks to demonstrate that one effect can be a cause of others; therefore the actions of the partners will affect the process of implementation, design and formulation of policy. It is important that stakeholders understand the pressures on resources and the state of the system as well as the Government limitations, as this fosters willingness to extend their collaboration for conservation. The understanding must be built on a base of openness and seriousness, and with sincerity.

Evidence presented in this research indicates that there is little shared understanding, even in Chimanimani where respondents were supportive. One can reasonably argue that the importance of promoting shared understanding was under-rated, perhaps being clouded in the MER by the 'promise of a stream of benefits' particularly to the poor. It seems that the approach had more to do with 'selling the project' than building a shared vision and mission. There is no evidence of the use of a structured, facilitated process being implemented. One can reasonably speculate on the likelihood of achieving collaboration if stakeholders do not hold a shared vision and mission.

Getting the work done

The openness to involve the other stakeholders will foster partnerships, as the stakeholders will feel useful. If there is understanding between parties and a common vision has been set it is possible for each stakeholder to use his/her ability to contribute to the process of design, reformulation and implementation of policy.

Formation of networks for interactions even if they are informal, will allow spreading of new ideas through them (Senge 1999). It was demonstrated in Chimanimani that the NGOs and Government have complementary roles in the work they do with local communities, yet their alliances are not formal at all. The situation in the MER is worse because here even the traditional structures are weak and there are presently few prospects for structuring networks. Government would have to appreciate the importance of networks in 'getting work done', especially when it has such limited capacity. Indications are that government had a somewhat shallow understanding of the nature and dynamics of networks and their role in achieving the intentions of policy through implementation.

Supporting institutions

By establishing practices of openness and transparency, the process of designing the policy will be trusted. For the stakeholders to make their views, perceptions and concerns heard requires that they are part of a credible constituency. It is through the organization that individual contributions can be shaped and directed for common cause. Those that require support mostly the local communities, will be able to receive such support from the group of stakeholders. Communities based organizations can be assisted to express their contributions in the context of a framework for the process of policy design and implementation.

Government clearly appreciates the importance of supporting institutions at the broad scale policy level. What it failed to fully appreciate and address was the weakness of

local institutions. Whilst the traditional institution was quite strong in Chimanimani, it had a very weak understanding of the process being followed and of its role in that process. In the case of the MER where hostility had built up over many years, commitment and special skills are required to build a supporting institution. This could be done directly, assuming Government has the capacity, or as is more common, indirectly by using NGOs as intermediaries. The present model of a partnership between government, the private investment sector and communities is not sufficiently explicit about the roles of NGOs as 'honest brokers'.

7.7 Monitoring and feed back

The framework developed for this research is explicit about feed back loops; if they are operating properly they continually inform decision-making. The establishment of the Trans Frontier Conservation Areas Unit dedicated to facilitation may have been a response to feedback indicating failing implementation of policy. More likely though, is that it was a response to new perceptions in Government about collaboration in conservation across national boundaries. Justification for this assertion is that the TFCA Unit operates only in conservation areas that can be connected to similar areas in adjoining countries.

Incorporation of a framework such as the one developed for this study, into planning and management would raise the profile of monitoring progress and of feedbacks, making management more responsive. It will allow readjustment of the policy in the long term and of implementation in the short term to better suit the needs of the stakeholders. Hockings *et al.*, (2000) define this as adaptive management that is a circular rather than linear management process, which allows information concerning the past to be fed back into and improve the way management is conducted in the future. The better feedback is monitored and taken into account in decision-making the more institutions are strengthened to work for common cause.

The study has shown that there are some weaknesses linked with the policy of forest and wildlife of Moçambique and more particularly with implementation. It also showed that the policy intent no matter how good is not enough to draw people into supportive behaviour. The process adopted by government might be characterized as consultative rather than participatory. Effective participation of stakeholders on formulation and implementation of policy is shown to be crucial, particularly when tensions exist between parties. There is no prospect of a just and lasting solution to the MER situation until there is real dialogue with willingness to seek innovative solutions. Even in the Chimanimani, there is need for improved dialogue because their support is at risk for as long as they remain confused about the relationships between Government policy and the work of the TFCA Unit.

Nothing can grow in a self-sustaining way unless there are reinforcing processes underlying its growth. Therefore, thinking strategically about initiating, sustaining and spreading fundamental management innovations requires appreciating and reinforcing

processes that could cause such growth (Senge 1999). The framework developed for this research was an incomplete tool to analyze the policy, as it did not consider a number of factors that could influence the process of policy formulation and implementation. Some of the factors that could be included in further conceptual analysis are:

Donor's perceptions and demands

In developing countries conservation support commonly relies on donor funding. Donors condition their support to specific policy measures or regulations not all of which may be appropriate for the context in which conservation has to be implemented. As this research has shown, assumptions need to be made explicit. If assumptions about donor perceptions and demands are not explicit it can lead to confusion about expectations when it is too late to take corrective action.

Pressure groups

This research has exposed the importance of sustaining dynamic networks among stakeholders. It has also shown that when capacity is assumed to exist but does not, then Government (in this case) was not sufficiently empowered to address constructively pressure groups such as those in the MER. A typical reaction to such pressure groups when respondents are not appropriately empowered is to avoid contact, making matters worse. As Senge (1990) points out, tension when managed properly provides learning opportunities. In the MER, tension does not appear to be a focus for management and under such conditions it becomes destructive.

Political influence

Political support for implementation of the conceptual framework can be key to successful design of the policy but on the other hand, it can also threaten the participatory process by not respecting it, particularly when it challenges the current political dogma. This research indicates that there was not sufficient political response to the problems that arose during implementation. Failure did not appear to result in remedial action. In the MER, political response was evident in termination of the Blanchard SODETUR Agreement but a response at community level was not evident. This failure of Government to respond contributed to growing a perception among local people that Government was not sincere in its policy intentions.

7.8 Conceptual frameworks policy design and implementation

Government policy is an instrument designed to regulate societal behaviour. As such it is not an end in itself, it means to an end. Because policy is embedded in society it is a part of a dynamic system in which beliefs, values and norms are continually adjusting to changing environment. Consequently policy and more especially the implementation of policy must be responsive to how society perceives the world. Because society is not homogeneous perceptions vary and it is easily appreciated that to achieve support for policy and participation in implementation requires a process that sustains a shared vision

and mission. This informs us that policy reform is not a one directional process. Rather it is characterised by a network of processes that operates as a complex system and as such, the best prospects for understanding the system and how it works are to be found in systems analysis along the lines used in this research.

Complex systems have many interactions and every one is a potential barrier to achieving an integrated outcome, especially as it may take a single failure to be propagated through the system to cause widespread failure. In a like manner however, successes can propagate through the system yielding synergy and improved outcomes. It is because of this interconnectedness that it is inherently difficult to sustain integration. This is why it is so important to dedicate resources to managing integration. But this alone is not enough. What is required is an hypothesis of how the system works because this exposes the assumptions that stakeholders are making. In essence, the hypothesis is established to test assumptions. By making these assumptions explicit, stakeholders are drawn to a common understanding of the system, how it operates and the likely implications of failure at one or more locations in the system. This assists actors to understand their roles and the interdependence of roles and this in turn, enhances accountability. Whilst all actors should be committed to achieving integration, in matters of government policy implementation, government must be accountable for making integration work, even if it delegates this role to another party.

The study sought a way of taking into account the changing context in which conservation operates and the complexity of implementing conservation actions. It was conceptualized on the premise that an academically and logically drawn policy could fail if the assumptions, particularly around the resources required to implement policy, were not understood and taken into account. The process was envisaged to be social rather than technical and as such, the main resources factor should be people as it is they who will be responsible for building and sustaining partnerships founded on mutual respect and trust. As it is almost certain that failures will be encountered along the way, the partnerships need to be resilient if they are to overcome failures and design remedial actions. Respect and trust re the foundations for resilience.

The study showed that formulation and implementation of a policy to be used by different constituencies follows complex paths and is a very sensitive process. Successful collaboration depends largely on what can be described as people-related factors, Weiss and Visoni (2001) observe that solid contracts, sound financials and good business strategy alone will not ensure successful partnerships, as the poor or damaged working relationships between partners is the foremost cause of alliance failure. Thus, the relationship side of alliances and partnerships must be proactively addressed if a united policy is to succeed. These views are corroborated by the findings at the Maputo Elephant Reserve where damaged relationships have caused alliance failure between government and the local people. In addition, the research suggests that had a systems approach been adopted whilst it would not have prevented failure of the Blanchard SODETUR initiative, it would have promoted a more structured and participative approach to dealing with failure when it arose. This would have helped develop a shared understanding of failure that would have strengthened the alliance thereby providing a

platform for the search for a new strategy. Perceptions about policy and its implementation would have been more positive and the prevailing attitude would be more constructive than it is now.

In the case of Chimanimani, the alliance is fragile because it is based on a confused picture of the relationships between the benefits that the community has experienced and conservation. For example, a local leader linked the vaccination programme to conservation even though they were not directly related. The linking of cause and effect is central to building a strong alliance based on shared understanding and trust (Wells and Brandon 1992; in Jones and Chonguiça 2001).

7.9 Conclusions

This research set out to test the usefulness of applying a systems approach to the analysis of policy implementation. The philosophical foundation was that a systems approach makes implicit assumptions explicit and by doing so it facilitates understanding of how the system operates. The conceptual framework developed in response to the hypothesis, exposed some critical assumptions on the part of government. These were shown not to be valid and the implications are shown to be serious for building the strategic alliances that are a requirement of policy. Indeed, as predicted from the model attitudes have hardened in situations where failure is experienced.

The model also illustrates that because of the interconnected nature of the system, failure at one point can be magnified as it is propagated through the system. Had a modeling approach been applied, Government would have been better positioned to understand the implications of failure and to design remedial action.

It is concluded that the approach can be helpful in both theoretical analysis of policy reform and in management of the implementation of policy. In the form presented it is technically simple and should be easily comprehended and applied.

The research has exposed a number of issues that offer interesting prospects for research directed towards establishing principles. As perceptions are shown to be so important in determining behaviour, it is suggested that there would be merit in elucidating the principles that underpin management of perceptions. In this research some perceptions are based on misunderstanding, others are founded on mistrust and yet others are shaped by tension between stakeholders. A second and related theme is the management of tension between stakeholder groups. As some degree of tension is inevitable and may even be desirable, it is clear that there is a need to know how to empower people to manage tension between groups of stakeholders.

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