Institutional development for community based resource management:

A Mozambican case study.

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By

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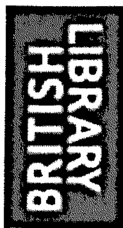

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Abstract

This thesis examines the implementation of community based natural resources management (CBNRM) initiatives in Mozambique within the southern Africa context. CBNRM has been used by governments, the tourism industry and conservation agencies as a model for involving local people in biodiversity conservation activities, promising to deliver benefits enabling rural communities to improve their livelihoods. This thesis argues that the practice to date demonstrates that satisfying people's needs and wants still remains a task to be fulfilled. The conservation priority has reduced poverty alleviation to an 'add on' status in project initiatives.

Applying a qualitative methodology with a critical perspective the author undertook an action research project using various methods of data collection in order to investigate the hypothesis: genuinely empowering local people can best ensure the conservation of the country's natural resources and deliver sustainable human well-being to local communities. Assuming that the conservation of natural resources is essential for any development plan, a key problem is how to link local development objectives to national development goals. To date CBNRM has been primarily implemented in the region for the sustainable use of wildlife, particularly, of big mammals. It has been mainly concerned with conservation rather than development. The thesis explores how the use of other natural resources in a more integrated and participatory way may offer other possibilities for the development of rural communities.

This research reveals how actions which could eventually empower local people, challenge the *status quo*, and therefore meet resistance. Community participation has also, in many cases, been practiced to empower the wildlife elites, tourism and conservation agencies, 'to feed elephants' instead of enabling local people to ensure that they have a decent livelihood and thereby help to guarantee the country's prosperity. The research findings suggest that what people want is to prioritise improving their livelihoods, using conservation and natural resource management strategies as a means to ensure the sustainability of their lives.

The two community case studies investigated reveal that food, health, education, social security and social cohesion, and equal opportunities for access to the market are the priorities of local communities. The tension between external-actor defined problems and solutions and locally defined problems and solutions, remains the reality in many rural areas because of the different agendas of the various stakeholders. For sustainable economic development objectives to be achieved in Mozambique, whether they be local or national, there has to be an agreed agenda and an environment of respect, trust and social cohesion created among all of the stakeholders. For this to succeed, community livelihood approaches should be developed in order to enable people to engage freely and to contribute both to development and to conservation of the environment.

To Júlio and Maria Ester Ribeiro

For everything they have been doing for Mozambique

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This thesis was born out of a collaborative endeavour between M'Punga and Tanga community members, a number of government and donor officials, and research team members. I wish to record here that by working thus together, assuming all of the consequences, which may flow from this, was the first step in the struggle for a better life. This experience has been for me both pleasant and enlightening. Seated in circle on the ground and sometimes around the fire or at a table in a hut or hotel we have learned that we have 'common problems but uncommon solutions' in learning how to build new approaches for a sustainable livelihood. I have endeavoured to make this thesis a synthesis of our everyday experiences gained over the last decade.

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Acronyms

ADMADE	Administrative Management Design Programme, Zambia
AIM	Agência de Informação de Moçambique [Mozambique News]
CAMPFIRE	Communal Areas Management Programme for Indigenous Resources, Zimbabwe
CASS	Centre for Applied Social Sciences, University of Zimbabwe
CBNRM	Community Based Natural Resource Management
CEF	*Centro de Experimentação Florestal* [Forestry Research Centre], Ministry of Agriculture and Rural Development, Mozambique
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CPR Digest	The Common Property Resource Digest, the quarterly publication of the International Association for the Study of Common Property
DEA&T	Department of Environmental Affairs and Tourism, South Africa
DNFFB	*Direcção Nacional de Florestas e Fauna Bravia* [National Directorate of Forestry and Wildlife], Ministry of Agriculture and Rural Development, Maputo, Mozambique
GOB	Government of Botswana
GOM	Government of Mozambique
GOZ	Government of Zimbabwe
GTA	*Grupo de Trabalho Ambiental* [Environment Working Group], Mozambique
GTZ	*Deutsche Gesellschaft für Technische Zusammenarbeit*, Germany
IDRC	International Development Research Center, Canada
INE	*Instituto Nacional de Estatística* [National Institute of Statistics], Mozambique
IUCN	The World Conservation Union
LIFE	Living in a Finite Environment Programme, Namibia
MAP	*Ministério da Agricultura e Pescas* [Ministry of Agriculture and Fisheries] Mozambique
Marena	Management of Renewable Natural Resources. A research project undertaken by the School of African and Asian Studies, University of Sussex, UK, the Forum for Social Studies, Ethiopia, and the *Centro de Experimentação Florestal* (CEF), Mozambique
MPPB	Mozambique Peace Process Bulletin
NGO(s)	Non-Governmental Organisation(s)
NRMP	Natural Resource Management Programme, Botswana
OECD	Organisation for Economic Co-operation and Development
PROAGRI	*Programa Nacional de Desenvolvimento Agrário* [Agriculture Sector Investment Programme] a five year plan for the Ministry of Agriculture and Fisheries, Mozambique
SADC	Southern African Development Community, which replaced the SADCC in August 1992. Member States are Angola, Botswana, Democratic Republic of Congo, Lesotho, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe.
SADCC	Southern African Development Co-ordination Conference
SASUSG	Southern Africa Sustainable Use Specialist Group of the IUCN Species Survival Commission, under the Sustainable Use Initiative
SPFFB	*Serviço Provincial de Florestas e Fauna Bravia* [Provincial Service for Forestry and Wildlife]
UEM	Universidade Eduardo Mondlane [Eduardo Mondlane University], Maputo
USAID	United States Agency for International Development
TFCA	Transfrontier Conservation Areas
UK	United Kingdom
WCED	World Commission on Environment and Development

Chapter One

Introduction

"Help the rural and poor people to gain more of what they value,
and to demand and control more of the benefits of development"
(Chambers 1983: 217).

"Humanity stands at a defining moment in history. We are confronted with a perpetuation of disparities between and within nations, a worsening of poverty, hunger, ill health and illiteracy, and the continuing deterioration of the ecosystems on which we depend for our well-being" (United Nations 2000: §1.1). This situation was recognised by more than 178 governments at the United Nations Conference on Environment and Development, also known as the 'Earth Summit', held in Rio de Janeiro, Brazil, from June 3rd to 14th, 1992. At that historic meeting a clear message echoed forth: "integration of environment and development concerns and greater attention to them will lead to the fulfilment of basic needs, improved living standards for all, better protected and managed ecosystems and a safer, more prosperous future" (*ibid.*: §1.1). Agenda 21, an important outcome of the Earth Summit, was adopted by a global consensus at the plenary session on June 14th, 1992. It offers a comprehensive plan of action to be undertaken by the international, national and local communities. It provides an *aide memoir* of the pressing problems facing the planet and it aims at preparing all nations of the world for the environmental and development challenges of the 21st century (United Nations 2000: §1.3).

Twenty years before, in Stockholm, in June 1972, the United Nations Conference on the Human Environment recognised the necessity for harmonising the conflict between the need to protect and improve the environment and the needs of people's development. Many development projects have been blamed for causing the loss of natural habitats and of undermining subsistence ways of life (Adams 1990: 1). "There has been a self-conscious effort to move beyond environmental protection and transform conservation thinking by appropriating ideas and concepts from the field of development" (*ibid.*: 1). Today it is recognised that development crises and environmental crises exist side by side, and there are close and reciprocal links between development, poverty and the environment

(*ibid.*: 9). Until recently, the two fields, environment and development, were entirely separate, each one with its own language and research agenda, its own culture and literature (*ibid.*: 8). In practice, many of the subsequent conservation and development programmes have been narrowly conceived, reflecting the academic or ideological preoccupation of the specialists concerned, and without awareness of the broader social implications (Anderson and Grove 1987: 3).

In 1980, the International Union for the Conservation of Nature and Natural Resources (IUCN) published the World Conservation Strategy (IUCN 1980) in an attempt to promote the integration of development objectives with environment goals and the participation of local people (Anderson and Grove 1987: 3; see also Adams 1990). Despite this attractive approach, "the World Conservation Strategy simply implies that the conservationists' vision of society must predominate" (Anderson and Grove 1987: 3). It fails to examine the social and political changes needed to meet those goals (*ibid.*: 3). As William Adams has argued, the World Conservation Strategy is blind to the fields of policy and political economy (1990: 51). There are also other formulations attempting to integrate development and environment ideas and principles, labelled 'ecodevelopment', developed after the Stockholm meeting and promoted by the United Nations Environment Programme, which address the satisfaction of the people's basic needs (*ibid.*: 51-52). However, this demands a "tightly controlled society with 'political cohesion'" (*ibid.*: 56). "The sustainable utilization of resources and the realization of basic needs is to be achieved through a strongly authoritarian state" (*ibid.*: 56).

This introductory chapter will begin by providing a global background of the significance of the binomial environment plus development for communities. In the following two sections we analyse how new approaches to conservation and development are required in order to alleviate poverty, facilitate economic grow and ensure the

conservation of biodiversity. Following this literature review and a review of local communities' questions, we proceed to a discussion of the research methods used in this reseach. We then provide an overall country context and examine the policy framework for the forestry and wildlife sector of Mozambique, we review the research strategy applied which enabled the local research agenda to be developed in partnership with local communities.

1.1. Global backdrop

"The 'environment' is where we all live; and 'development' is what we all do in attempting to improve our lot within that abode. The two are inseparable" (Brundtland 1987: xi). In the distant past, back in prehistory, conservation of the environment had been a common community practice to ensure the satisfaction of human needs, rather than being "an altruistic concern for animals and plants" (Western and Wright 1994: 1). The continuing existence of wilderness is the result of low human population density, limited technology, and undeveloped or restricted markets. When the natural resources ran low new, formerly wilderness lands were always accessible (*ibid.*: 1). The term 'lands' is conceived here to include the whole environment of the areas, including all natural resources, which the people concerned traditionally occupy (United Nations 2000: §26.1).

Today, humanity faces multiple environmental and development issues and challenges, for a number of reasons. Firstly, there was earlier a too narrow focus on conservation of the environment. Secondly, in the past the development process has been predicated upon an untenable basis of 'unlimited' and 'free' natural and human resources. Thirdly, there has been too great an acceptance of inequality within society. The earth, water and air, which are vital to human life and provide the essential inputs for the goods

and services upon which human development has been based, are facing enormous challenges, not all of which are under human control. To mention just some of the problems, as they frequently appear upon national and international agendas and in the media: climate changes; natural disasters such as drought and floods; and earth, water, and air pollution as a by-product of economic growth. Deforestation and desertification, extinction of species and habitats are also the result of economic growth, involving the accumulation of wealth for some, and bare survival or worse for others. Poverty is not only a result of population growth outstripping growth within the economy, but also is a consequence of the alienation of local communities from their lands involving the destruction of many viable rural economies and even civilisations.

Greed, often allied to the use of force, is at the root of many of these problems: development based on robbery and pillage, kidnapping, war, and conquest for political, social and economic reasons or status. In endeavouring to procure spices, some nations and people became *conquistadors*. With the right of conquest came the right of exploiting other people and lands, and this formed the basis of present development patterns and of currently dominant civilisations. The historical process of economic growth is one in which only a few countries 'take-off' into a self-sustained and regular growth leading to the age of high mass-consumption (see Rostow 1956 and 1965). As defined by Rostow, the 'take-off' is "an industrial revolution, tied directly to radical changes in methods of production, having their decisive consequence over a relatively short period of time" (1956: 185). The industrial revolution opened the expansion of consumption levels up beyond basic needs, "not only to better food, shelter, and clothing but into the range of mass consumption of durable consumers' goods and services" (Rostow 1965: 74), and permitted some groups to look over their borders to conquer new lands (*ibid.*: 73). Today, greed is expressed as unsustainable consumption levels of the world's natural resources. In some societies it is

also expressed as the growth in power of multinational corporations, risking the very autonomy of some governments, and as irresponsible and speculative use of the technology for profit maximisation, debilitating the environment.

This historical reality has created a global concern. This involves not only worries about the effects of development action on the environment, in terms of lost ecosystems and species, and latterly the negative impacts of development on natural resources for human use (Adams 1990: 5), but also the fact, disclosed by the World Commission on Environment and Development (WCED), that environmental degradation can reverse economic development (1987: 35). This risk is shared by all, rich and poor, those who benefit from the prosperity and those who do not (*ibid.*: 35). We are living in a new era in which we are beginning to understand that human and natural resources are not really unlimited as was thought to be the case in the colonial and post-colonial period. Those 'free' resources are now under stress, and some are really scarce.

All of the above and other environment and development issues are interrelated and affect all of humanity. As pointed out by the WCED, environment and development are "inexorably linked. Development cannot subsist upon a deteriorating environmental resource base; the environment cannot be protected when growth leaves out of account the costs of environmental destruction" (1987: 37). The policy implications are then laid out: "The challenge facing nations today is no longer deciding whether conservation is a good idea, but rather how it can be implemented in the national interest and within the means available in each country" (*ibid.*: 147). A global harmonisation is required to protect life on planet Earth. "Development must not endanger the natural systems that support life" (*ibid.*: 45). Thus a "rational management of the environment is critical to the achievement of development which can be sustained for generations to come" (Adepoju 1997: 2).

Two of the most common and popular images of the African continent in the media can help to visually portray the above introductory comments. One image is of starving children in a degraded or arid savanna, or in a semi-desert area, with one or two distant trees of a large canopy. The other, with exactly the same background environment portrays instead of starving children, corpulent elephants. The first has been used for aid purposes or winning public support, and the second for selling tourism packages.

However, behind these two images we can detect the social aspects of such environmental degradation: the contrast of poverty and wealth. The significance and importance of these phenomena was pointed out by WCED, reasoning that the failure of harmonising environment and development originated both from the widespread poverty of many countries and the prosperity of a few others (1987: 27). Poverty is seen as the result of processes of concentration of wealth in certain places, and of power in a few hands (Chambers 1983: 37).

Robert Chambers argues that the processes which lead to poverty are produced at three levels. Internationally, as the history of economic growth shows, the rich countries created the poorer countries, maintaining them poor via colonial exploitation, post-colonial unequal exchange and expatriation of profits from the investments undertaken in those poorer countries (1983: 37). Nationally, urban elites and middle classes accumulate wealth by both investing in industries and services established in the urban areas, and on trading with rural people, acquiring particularly cheap raw-materials and food, as well as labour, and selling costly goods to the countryside (*ibid.*: 37). In rural areas, local elites such as bureaucrats, merchants and moneylenders gain their portion of wealth and power by being the intermediaries in the exploitation process, appropriating common resources, maintaining rural poverty with low wages and restricted access to the natural resource base (*ibid.*: 37).

This path pursued in the past created "a vicious downwards spiral: poor people are forced to overuse environmental resources to survive from day to day, and their impoverishment of their environment further impoverishes them, making their survival ever more difficult and uncertain" (WCED 1987: 27). The prosperity which is attained, is often unsupportable and precarious, "as it has been secured through farming, forestry, and industrial practices that bring profit and progress only over the short term" (*ibid.*: 27).

Both poverty and prosperity are responsible for the environmental degradation and this is eroding the long term potential for any economic development (WCED 1987: 35). Poverty "reduces people's capacity to use resources in a sustainable manner; it intensifies pressure on the environment" (*ibid.*: 49). Prosperity leads to an unsustainable consumption level of the world's natural resources. Natural resource utilisation has become a serious problem for everyone.

The African continent is part of the global environment, and African people also contribute to this development process, and face the same, or even worse, problems. If the remaining natural resources are consumed in exchange for the benefits of short-term prosperity, it will be more costly to repair in the long run. Some African leaders, government and non-government officials, academics, urban and even rural people have had the tendency to neglect this problem in favour of other immediate political, social or economic priorities: *e.g.* export of natural resource products for foreign currency earnings, with more land utilised for cash crops and less for ensuring food security, the production of charcoal for local people's cash needs at the expense of maintaining tree cover, and so on.

One of the major challenges that Africans face is to protect their natural forests and woodlands. Forests and woodlands offer habitats for wildlife, such as the big mammals that have brought tourism to the continent, and other wild species, they protect watersheds and reduce erosion, and have their function in global climatic systems, but also they are a vital

economic resource in order to ensure that people can survive or even prosper. They provide sources of fuelwood and timber, food, medicines, and so forth and when cleared offer land for agriculture. However, opening forests for agricultural land or woodfuel collection is a major cause of environmental degradation in Africa.

For too long in Africa, the availability of natural resources was taken for granted: "The woodfuel problem was neglected for too long, precisely because it was assumed to be an easily available free good" (Munslow *et al.* 1988: 6; see also Munslow 2001: 2). Referring to the growing scarcity of woodfuel in southern Africa, Munslow *et al.* state that: "Unlike the 'other' energy crisis, that of oil, the woodfuel problem did not immediately ring warning bells for governments in the form of balance of payments deficits and fuel shortages affecting the vital arteries of transport and industry. Instead it was a problem experienced in dispersed, but growing locations throughout the region. But rather like drought which also starts slowly, the impact of the fuelwood problem can have far-reaching effects" (1988: 6). In terms of its social costs Munslow *et al.* go on to argue that "most importantly, the fuelwood problem is a burden carried, and carried quite literally, by women, whose voice so often remains unheard but whose labours keep the wheels of everyday life turning" (*ibid.*: 6).

In an attempt to understand the reasons behind the growing woodfuel energy crisis within the member states of the Southern African Development Co-ordination Conference (SADCC) and to develop further a regional fuelwood policy, a study was conducted by Barry Munslow *et al.* (1988), through the ETC Foundation (Consultants for Development) and commissioned by the SADCC Energy Sector. The study covered all of the member countries at that time, which included Angola, Botswana, Lesotho, Malawi, Mozambique, Swaziland, Tanzania, Zambia and Zimbabwe. This study clearly showed that: first, the woodfuel crisis is not simply an energy crisis; and secondly, a new approach is needed in

order to address the package of peoples' problems in the region based upon improved land use management; and thirdly, separated but related policies have to be developed for urban and rural areas.

The authors of this study, entitled The Fuelwood Trap, found that the problem was much wider than a simple energy issue, "trees and woody biomass more generally, are too important to be consigned 'merely' to a fuelwood problem" (Munslow *et al.* 1988: 33) by local communities. There are many and varied local demands for the use of trees other than fuelwood. As already indicated above, some trees provide timber to build houses, granaries, fences, fodder for cattle and fertiliser for soil, food, medicines, dyes, natural fibres and shade (Munslow *et al.* 1988: 18). In addition to these uses, there is an urban demand for poles for construction, fuelwood and charcoal (*ibid.*: 18). African cultures and religions give also a high significance to the trees: "Trees are life in its many aspects" (*ibid.*: 18).

Urban areas are a place of fuelwood consumption and where alternative sources of energy and cash to pay for them are more easily accessible (Munslow *et al.* 1988: 29). By contrast the rural areas are a place of fuel consumption and production with few competitive alternative sources of energy (*ibid.*: 29). "The problem is not general, it is specific to people and to place" and, therefore, the effective solutions also should "be specific to people and to place" (*ibid.*: 149).

A new approach is required which should seek solutions in a more co-operative, responsible and holistic way, one not solely concerned with a narrow focus of attempting to balance out woodfuel supply and demand, focusing on the conventional supply-enhancing, demand-constraining and fuel switching approaches, or being tied to the traditional institutional delivery mechanism of the state (Munslow *et al.* 1988: 8-15). For instance, solutions such as the conventional forestry plantation, assigning vast areas of

indigenous woodlands as protected areas, developing communal woodlots, improving stove technologies and charcoal-making technologies cannot be embarked upon in isolation from the local context (*ibid.*: 8-15). "Supply-and-demand balance and projections hide a complex pattern of specific areas of surplus and deficit" as the woodfuel shortage may occur in different areas, "pockets or mosaics of varying levels of stress" (*ibid.*: 11; see also Leach and Mearns 1996: 2-3).

For Barry Munslow *et al.*, the "way to deal with the fuelwood problem may not be through fuelwood solutions at all but rather, paradoxically, through finding solutions to other problems" (1988: 17). "This is because such solutions can meet more pressing and fundamental needs" (*ibid.*: 17). "There is not just one, very big problem of energy supply, but many smaller problems of command over trees and their products to meet a wide range of basic needs, including food, shelter, income and investment" (Leach and Mearns 1996: 3). Melissa Leach and Robin Mearns demonstrate the manner in which problem and solution were framed, in the case of the African woodfuel crises, and offer an example of how received international wisdom about environmental changes obscures others views, and repeatedly induces misguided or flawed national development policies (1996: 3).

Robert Chambers has argued that rural development has to be "a strategy to enable a specific group of people, poor rural women and men, to gain for themselves and their children more of what they want and need. It involves helping the poorest among those who seek a livelihood in the rural areas, to demand and control more of the benefits of development. The group includes small scale farmers, tenants, and the landless" (1983: 147). For Barry Munslow *et al.*, the policy aim "is about how to produce sustainable development" (1988: 149). As defined by the WCED in Our Common Future, also known as the Brundtland Report, sustainable development is development that "meets the needs of the present without compromising the ability of future generations to meet their own

needs" (1987: 8). This definition accommodates two primary concepts, namely the satisfaction of people's essential needs, and the restrictions imposed by the state of technology and social organisation on the environment's ability to meet present and future needs (*ibid.*: 43). As argued by Barry Munslow *et al.* sustainable development is about ameliorating the overall quality of life and satisfying peoples needs (1995: 4).

For Timothy Doyle and Doug McEachern, sustainable development seen as economic growth carried out in a sustainable way to provide human welfare, is inevitably linked to the survival of the environment. This involves maintaining the flow of natural resources needed for economic production, for the capacity of the soil to sustain food production, and for the health of air, rivers and oceans (1998: 35). Both human and natural resources are critical in this equation, but ultimately it is people who have to resolve the uncertainty of managing the natural resources (Munslow *et al.* 1995: 4). Sustainable development is concerned with control, power and self-determination (Adams 1990: xiii). This assumes some form of command by local people of local resources, implying a certain degree of state decentralisation to local communities and a democratisation of society.

However, as argued by William Adams, within the sustainable development concept "lies a deeper and more subversive vision concerned with the nature and the scale of power over environment and people" and this power has been "held by the states and their international advisers" (1990: xiii). The power has been used to enhance the capacity of centralised governments' structures rather than to develop "the capacity of people to plan and run their own lives, or control their own environment" (*ibid.*: xiii). "Development is elaborated by technicians and administrators, and implemented on rural areas with little scope for action or innovation by peasants themselves" (Harrison 2000: 4). Moreover, according to Graham Harrison, although the majority of sub-Saharan Africa's people live

and work in rural areas, the existing democratisation process tends paradoxically to concentrate on urban minority politics (2000: 1).

For Bernardo Ferraz and Barry Munslow, the existing policy, programme and project formulation approaches in Mozambique need to be transformed (1999: 3). "This requires responding to people's own priorities rather than determining them from the top down, facilitating self-help and working in new partnerships between state institutions and those of civil society" (*ibid.*: 3). Barry Munslow *et al.* have argued that people participation and smallholder-farmers' knowledge and experience "is the only starting point from which a real and indigenous development plan can begin" (1988: ix). There are several uses and meanings for the words 'people participation' such as those with a 'cosmetic stamp to look good', 'co-opting practice to secure local action and resource', and 'empowering and enabling people to take command and do things by themselves' (in Chambers 1994: 1-2; see also Nelson and Wright 1995; Pijnenburg and Nhantumbo 1998; Barrow and Murphree 1999; Pijnenburg 1999). Participation is conceived here as a process of people's empowerment, participation as an end as opposed to participation as a means to get things done. It means that the outsiders are involved in the local people's development plans (see Chambers 1994: 2).

Many officials, academics, politicians and donors around the world began to see local communities and their traditional knowledge and institutions as the means whereby they can ensure local biodiversity conservation. The principal argument underlying this position is that local communities have conserved their environment successfully over time. Today, there is increasing evidence, for example, that many of the existing patches of forest in West Africa are not the remnants of widespread forest destruction as was believed but rather they represent the result of local people's knowledge, and the work of themselves and their ancestors, in a long process of deliberate forest management as

demonstrated by the research of James Fairhead and Melissa Leach (1996; and 1998). David Hulme and Marshall Murphree argue that "the indigenous technical knowledge of rural Africans indicates that they have sophisticated understandings of environmental processes" (1999: 278), and "no longer should rural Africans be seen as degraders of the environment but as local heroes" (Hulme and Murphree 1999a: 1).

We have argued that we are living in a 'defining moment' in a world with great disparities, and the significance for all nations and people of the binomial environment plus development. The two cannot be separated. Conservation is to ensure human needs. The continuing deterioration of the environment may make unrealisable any future development actions. During the Earth Summit, in 1992, the international community recognised two global concerns. First, the present prosperity is unsupportable and precarious. Second, the necessity to reverse that 'vicious downwards spiral' where the poor live. The development path pursued in the past is responsible by having originated both prosperity and poverty, and these in turn are responsible for the environmental degradation and for reducing the potential for long-term economic development. Symbolically, this development path is essentially directed today to feed a few corpulent elephants in the best pockets of the environment at the expense of millions of skinny children abandoned and scattered in the rest of our environment without any prospects for tomorrow.

In order to reverse the downward spiral, conservation of the environment should have significance for all, international, national and local communities. To transform the situation into a positive upward spiral, we need to find solutions specific to place and to people. As with the fuelwood problem, possibly the solution for the environmental crisis will be found in finding solutions to many other problems created by the 'so-called' development process. As Barry Munslow has argued, there are two fundamental concerns. First, this traditional pattern of development still creates more poor people. Second, the

environment is treated as a free good, the place where we find the natural resource inputs for development and where we dump the waste of the mass production and consumption created by that development (2001: 2), by-products of the industrial revolution.

Precisely because existing development practice was proving too often not to be sustainable concerning the well-being of the poor and of our environment, the word 'sustainable' was added to 'development' in order to indicate new approaches which would endeavour to maximise human welfare and maintain the environment now and for the future (Munslow 2001: 1-2). "Each country will have to examine the principal challenges that it faces to make its own development sustainable" (*ibid.*: 1), and to define the kind of help that the rural and poor people need in order to "gain more of what they value, and to demand and control more of the benefits of development" (Chambers 1983: 217). Moreover, the local people and their communities need to benefit from international basic human rights and the attendant liberty without disadvantage, restriction or imposition, or discrimination (United Nations 1992: §26.1). This ensures their full participation in sustainable development practices on their lands, which has tended to be limited as a result of factors of an economic, social and historical nature (*ibid.*: § 26.1).

Local people also want development. However, they have their own vision of what constitutes progress, and this may be very different from the outsiders' model of development. They are well aware of their social limitations and deprivations, and the existing economic, technological and professional constraints. For instance, participants in the first community exchange workshop between Matutuíne, in Mozambique, and Maputaland, in South Africa, organised by the National Directorate of Forestry and Wildlife of Mozambique and the Group for Environmental Monitoring of South Africa, with support from the Ford Foundation, presided over by the Mozambique Vice Minister for Agriculture and Fisheries, Hélder Muteia, held in Ponta do Ouro, Mozambique, in July

1998, believe that skills training and local entrepreneurial capacity building is necessary to enable communities to acquire employment at senior levels, and to run local enterprises that can supply goods and services (Anon 1998: 5). People from those communities, recognising the need to acquire new organisational capacities and abilities, have also seen community capacity building as a means to realise their vision, in an authentic partnership with external actors. In particular they have identified the following prerequisites:

- "Establishing effective and democratic structures,
- Identifying and prioritising their needs and opportunities,
- Conceptualising and undertaking their own development initiatives and projects,
- Handling and resolving conflict within and between communities, and with state, private and non-governmental agencies" (Anon 1998: 2).

If some principles are indispensable for people's own development and the progress they long for, some problematic challenges also exist in order to fit this local development into the country's macro economic context and objectives. For instance, in the 1990's, a theme of discussion among the researchers at the *Centro de Experimentação Florestal*, the Forestry Research Centre, Mozambique, known as CEF, was the vinculum that exists between local development through people's participation and the country's global development (1994: 7; see also Ribeiro 1999 *Research notes*). As suggested by Martin Whiteside, "decentralisation of local government provides opportunities to develop new alliances and to provide more locally appropriate and accountable services" (1998: 5).

Finally, but not the least, in the words of Elia Ciscato which are worthy of quotation in the original Portuguese ".... *o obstáculo ao desenvolvimento não provém da cultura popular-tradicional, como poderia parecer, mas de outros factores, como por exemplo: a maneira como o desenvolvimento é apresentado ou imposto, o querer substituir*

sem que haja uma evolução que vem de dentro, o deixar o interessado fora do jogo...." (1987: 14). This literally translated is: ".... the obstacle to development does not originate from people's traditional culture, as it might appear, but from other factors, for instance: the manner in which development is introduced or imposed, the will to substitute from the outside without an evolution from the inside, leaving the subject out of the game....". The main drawback to such a development trajectory is the outsider tendering a kind of pre-designed development model without taking into account the inner evolution of the community and participation from the very beginning of any development initiative. Even the most 'primitive' (wo)man wants 'progress' but not '*the* progress', because this 'claimed' development model from her(is) outside world if accepted may kill her(is) identity and authenticity (Ciscato 1987: 14).

The above review of some of the major literature that has informed this study, indicates that the key point to stress within these new approaches is that the environment crisis should not be taken in isolation, instead there is a real need for a more bottom-up approach to development based on trying to actually satisfy people's needs. Conservation of the environment must be encouraged as a common community practice in ways which can help to ensure the achievement of sustainable livelihoods of the poor and of local communities.

1.2. Fortress conservation versus local heroes?

The new approach to conservation activities is based upon involving local people and accepts the fact that active natural resource use and market mechanisms can contribute to achieving both development and conservation goals. This approach is becoming more widely accepted by politicians, government officials and academics across southern Africa

in general and more recently in Mozambique also. However, the implementation of this approach has yet to deliver concerning people's expectations, as we will go on to show. We will examine the evolution of this new approach and will explore two key aspects in particular. First, people's participation has been manipulated to continue to benefit the elite in the core disregarding the periphery. Second, there is a tension between external-actor defined problems and solutions, and locally defined problems and solutions. Normally, this external-actor comes from the prosperity side endowed with a wisdom very different to the priorities of poor local people.

During the colonial period, local people were marginalised from their own land and resources; some of their land the colonial authorities turned into parks or reserves (see Chigoya 1999: 2; Ledger 1992: 2). Fences were built to separate the local people from the rich natural resource base to which they had formerly enjoyed free access. The Kruger National Park in South Africa, the largest park in Southern Africa, built an electrified fence along 123 km of the border with Mozambique to protect the wildlife from illegal immigration (Griffiths 1995: 96-97). For instance, in 1969, the Makuleke community was excluded from the northern sector of the Kruger National Park and lost about 24,000 ha of land (Ledger 1999: 3). This is what has been called a policy of 'fortress conservation'. It is based on "the preservation of wild species and the exclusion of humans from protected areas", which has been the norm in force across sub-Saharan Africa, based upon the argument of species extinction as an outcome of human activity (Adams and Hulme 1999: 14-15). Hence, "most government conservation departments in sub Saharan Africa had their origins in agencies established to defend hunting reserves and suppress poaching" (*ibid.*: 16).

During the 20th century, conservation thinking internationally was dictated by an imperative to set aside protected areas, reserves and parks, as a fortress defence for nature

(Adams and Hulme 1999: 15). In these areas, people were fenced out, impeded from using the so-called 'protected' natural resources and punished if they attempted to put some game in their pot or use it for trade (*ibid.*: 15). This has continued up to the present. From being hunters, the local people's style of life was dramatically transformed. They were denied legal access to their former natural resource base and they became designated as poachers when they tried to reclaim their former rights (see Ntiamoa-Baidu *et al.* 2000: 61). Yet those hunting rights were granted to European hunters whereas the local African populations were denied access to their traditional hunting practices (see Adams and Hulme 1999: 16; Chigoya 1999: 2; Ledger 1999: 1).

The development of big game hunting by Europeans in Africa is associated with the unfolding history of colonialism: initially, for the ivory trade; secondly, as a subsidy for colonial expansion, providing a source of food for labour; and thirdly, in the practice of trophy hunting of large mammals (Adams and Hulme 1999: 15-16). "Note, however, that identical systems were already in place long before in African monarchies, with King Shaka's royal hunting grounds strictly and punishably off limits to his subjects. The same applied to King Sobhuza with his exclusive game hunting area where today we recognise the Hlane game reserve" (Ledger 1999: 1). After the Second World War, the colonial governments started to institutionalise and organise paramilitary 'fortress conservation' in three distinct arenas. First, there was the establishment of Game Departments to regulate hunting and to protect people against the ravages of wildlife (Adams and Hulme 1999: 16). Second, National Parks Departments were set up to manage the protected areas where wildlife could flourish (*ibid.*: 16). With a similar agenda of land reservation, resource use and population exclusion, the third governmental conservation agency was created, Forestry Departments (*ibid.*: 16).

It was this government conservation structure which Africa inherited at independence. Africa's elites also internalised the narratives of 'fortress conservation' and a characterisation of the people being the principal destroyers of the species and habitats (Adams and Hulme 1999: 18). In that period, conservation was understood as being the preservation of wild scenery and species in certain areas, in which "those with interests in conservation and wildlife - conservationists, white hunters, forestry and wildlife bureaucrats and miscellaneous romantics - argued and negotiated for controlled hunting areas, reserves and other lands to be zoned for conservation" (*ibid.*: 18). There was no room for local people in those areas, and only scientists and "benignly-intentioned and wealthy tourists" were permitted to be present (*ibid.*: 18).

"The problem is most acute in areas where national policies deprive local communities of the right to use the resources on their own land. The resulting us-versus-them rush to harvest is the root of resource depletion" (Western and Wright 1994: 4). Enormous efforts and costs are involved in the implementation of a fortress conservation policy approach, which in effect African countries have neither the staff nor the resources to implement effectively. For instance, government departments operating from national or provincial capitals can enforce restrictions only by securing the employment of armed guards who have to be physically present throughout the national forest resource (Ascher 1995: 87). Moreover, there also needs to be an effective apparatus for taking the transgressors to court, but implementing such a policy is extremely expensive for most governments to undertake (*ibid.*: 87). As William Ascher observes "in many countries, the government is too weak, or devotes too few resources, to police the forests effectively" (*ibid.*: 87).

Both colonial and post-colonial governments have underestimated local community experience in conservation, management and utilisation of the natural resource base.

William Adams and David Hulme argue, the idea that "local communities can and do (and should be allowed to) manage wildlife was not invented in the 1990's" (1999: 19), rather "conservation by communities is therefore long established in Africa" (*ibid.*: 20). The new focus on conservation issues lays stress upon the important role of people's participation, emphasising "the need not to exclude local people, either physically from protected areas or politically from the conservation policy process, but to ensure their participation" (Adams and Hulme 1999: 19; see also Chambers 1994: 2-7). Community conservation, therefore, "represents a broad spectrum of management and benefit-sharing arrangements of the involvement in natural resource management of people who are not agents of the state, but who, by virtue of their location and activities, are critically placed to enhance or degrade the present and future status of natural resources" (Barrow and Murphree 1999: 44).

Concern over the issue of involving local community participation in environment conservation in Southern Africa can be dated back to the late 1970's. A wildlife husbandry scheme was initiated in Zambia in 1979, to address the issue of elephant protection and management in an area adjacent to the South Luangwa National Park (Rihoy 1995: 21; see also Milner-Gulland and Leader-Williams 1992: 196-197). The institutionalisation of community conservation as an officially sanctioned methodology in Africa, has been a process with 'false starts' and 'dead-ends', and originated from local experiments at different times and to different extents in different countries (Adams and Hulme 1999: 20). In their analyses on community conservation, William Adams and David Hulme found three crucial elements:

- The first is the scientific viability of isolated protected areas. This reflects the ecological view that conservation cannot be achieved and sustained on small fortress 'islands'. Evidence for this is the mobility feature of wildlife, the need for large

mammals, in particular, to move from one place to another, for feeding and breeding purposes, even if this means travelling great distances away from the protected area. Local communities, whose land the big mammals cross and crop, are and must be key stakeholders in conservation.

- The second is the recognition of the imperative for local people who live in and around protected areas, or for people who depend on the same resources for a living or with cultural links to the specific land area, to participate in the management of conservation resources.
- The third is the linkage of conservation goals to local development needs. The involvement of this link recognises the need to minimise the imposition of costs onto local people, which can have disastrously negative consequences for them, and to try to solve the problems of hostility between displaced or disadvantaged local people and the conservation agencies exercising a fortress conservation approach (1999: 21-22).

It is noteworthy here that from these three elements of community conservation, particularly the wildlife mobility, have originated the emerging cross-border conservation initiatives in southern Africa: the Transfrontier Parks and Transfrontier Conservation Areas. For example, after being re-fenced, the Kruger National Park will be joined to Mozambique's game area of Gaza *Coutada* 16 and to Zimbabwe's Gonarezhou National Park, to constitute one Transfrontier Park. In October 2000, the Governments of Mozambique, South Africa and Zimbabwe created the Gaza-Kruger-Gonarezhou (GKG) Transfrontier Park (2000: article 1). It has been heralded by the Department of Environmental Affairs and Tourism (DEA&T) of South Africa, and by some regional conservationists as "a new era in ecosystem management and co-operation for southern Africa countries" (DEA&T 2000). We turn to this aspect on Chapter two.

Since 1992, following the Earth Summit, Mozambique has begun to design and implement community based resource management projects in order to achieve improved living standards for rural communities whilst ensuring the conservation of natural resources. In order to alleviate widespread poverty, the economic growth of local communities combined with conservation of the country's biodiversity has been the clearly stated objective of the government (Mocumbi 1998; and 2000). Agriculture, livestock, logging, wildlife and fisheries account for most subsistence livelihoods, employment, export earnings and the overall economic output of the country.

Community based natural resource management, referred to henceforth as CBNRM, is a broad concept expressed in different ways and terms such as 'community conservation', 'community-based conservation' and 'park outreach', and it covers a wide range of meanings and definitions as elaborated by David Hulme and Marshall Murphree (1999; and 1999a). These terms referred to "ideas, policies, practices and behaviours that seek to give those who live in rural environments greater involvement in managing the natural resources (soil, water, species, habitats, landscapes or biodiversity) that exist in the areas in which they reside (be that permanently or temporarily) and/or greater access to benefits derived from those resources" (Hulme and Murphree 1999a: 5; see also Adams and Hulme 1999: 19).

For David Western and Michael Wright, community-based conservation may involve both new and traditional methods, and includes also conservation efforts that arise from within or from outside a community, so long as the outcome benefits the community (1994: 7). According to Murphree, "the term *community-based conservation* contains an objective - conservation - and an organizational approach through which to achieve this objective - the community" (1994: 402). Moreover, community conservation as it was defined here says that conservation goals have to be pursued by strategies that stress the

role of local people in decision-making about natural resources (Adams and Hulme 1999: 19). The current strategies to achieve the conservation objectives are commonly known as community participation, or people participation (see Barrow and Murphree 1999). Thus community-based conservation has been perceived as the converse of the well established top-down approach of "center-driven conservation by focusing on the people who bear the costs of conservation" (Western and Wright 1994: 7).

For David Western and Michael Wright, community conservation "includes natural resources or biodiversity protection by, for, and with the local community" (1994: 7) and "intentionally includes a range of activities practiced in various corners of the world that directly or indirectly lead to conservation" (*ibid.*: 8). Hence "the coexistence of people and nature, as distinct from protectionism and the segregation of people and nature, is its central precept" (*ibid.*: 8). The concept of 'participation' which underpins community conservation "is very broad and reflects the many interests' people have in who participates, for what purposes and on what terms" (Barrow and Murphree 1999: 45; see also Chambers 1994: 2).

Community participation is concerned with more than ensuring the success of local project initiatives. Participation has an intrinsic potential to transform local communities gradually instituting nation wide progress towards greater political, social and economic equality, increasing social and economic opportunities (see Chambers 1994). However, "community participation projects differ in the degree to which they involve local people, and the way in which they do so" (Adams and Hulme 1999: 22). At the one extreme lies existing conservation initiatives such as buffer-zone protection of parks and reserves with some 'spice' of community participation (Western and Wright 1994: 7; Adams and Hulme 1999: 22). At the other extreme are natural resource use and biodiversity conservation projects in rural areas carried out by local people alone, who are given full tenure over

those resources (Western and Wright 1994: 7; Adams and Hulme 1999: 22). Yet "in practice a great diversity of projects exists, often mixing different elements of these approaches" (Adams and Hulme 1999: 22).

In the 1990's, this was really a stimulating and challenging development and research idea. Many discussions were held among Mozambican officials and academics on two key themes: first, how to involve local people in natural resource management; and second, what appropriate practices should be disseminated by the extension services in order for local people to obtain economic benefits from the vast natural resources of the country without exhausting them. Welcomed by funding agencies, this new idea was soon converted into practice, being incorporated into both development and research projects, and it began to influence the reformulation of national policies. From 1992 onwards the former rhetoric of paramilitary style state management of protected areas was gradually, albeit haltingly and not unproblematically, transformed into one of local community participation in wildlife and forest management (Anstey 1999: 135). Community participation was seen as being essential for the success of projects. Community-based initiatives started to proliferate with support from both government and donor agencies. In the words of Roberts Chambers which help to understand this transformation, governments and donor agencies "require participatory approaches and consultants and managers say that they will be used, and then later that they have been used, while the reality has often been top-down in a traditional style" (1994: 2).

In 1998, an important critical note was introduced, when Joe Matowanyika argued that in Southern Africa community-based natural resources management projects have been externally activated and the ideas of community conservation were being imposed onto local communities and societies (1998: 3). The same issue then was addressed by Yussuf Adam, José Mate and Ofélia Simão (1998: 1-2), and later by Bart Pijnenburg

(1999: 4) in the case of Mozambique. Moreover, it also began to be questioned whether the intended beneficiaries, the local communities, were actually supporting those initiatives (Pijnenburg 1999: 4). Edmund Barrow and Marshall Murphree indicate that, with some important exceptions, the present acceptance and institutionalisation of community conservation programmes in Africa is mostly a "product of initiatives by international conservation agencies endorsed by state governments, shaped by conservation professionals and funded by international environmental grant sources" (1999: 51).

According to David Western and Michael Wright there are two agendas in community-based conservation: one, for most conservationists, is to make nature and natural products meaningful to local people, and the other, for local communities, is to reclaim control over natural resources and to improve their economic well-being (1994: 7). Edmund Barrow and Marshall Murphree argue that for people in urban and in industrial societies, from governmental, non-governmental, national and international agencies, for whom "wildlife has little direct economic significance", the importance given to wildlife is placed on its intrinsic or recreational and aesthetic value (1999: 51). They tend "to define conservation in terms of abstract concepts such as biodiversity and ecosystem maintenance, and to emphasise such goals as species preservation and the maintenance of micro-habitats for aesthetic and recreational use" (*ibid.*: 51).

For the rural African, wildlife, by way of contrast to the above, has instrumental and tremendous direct economic significance. The primary focus is to enhance and maintain their livelihood, with natural resource *use* being the objective and reason for their conservation ethic (Barrow and Murphree 1999: 51). African vernacular languages rarely have the abstract noun of 'conservation' and to interpret this concept requires the use of a phrase such as 'taking care of natural resources' (*ibid.*: 51).

Joe Matowanyika argues that the CBNRM initiatives in the region of southern Africa have been the key to achieving the conservation goals as a "very crude form of cheap labour and cutting down the costs of conservation" (1998: 3; see also Pijnenburg and Nhantumbo 1998: 6, for the case of Mozambique). These initiatives "have failed to look at the broader issues of food security, poverty and the total livelihoods of the communities" (*ibid.*:3). Hélder Muteia, Minister of Agriculture and Rural Development of Mozambique, said: "In today's world, conservation can not be separated from human development, and this has been amply demonstrated in many countries in southern Africa, where conservation that does not consider social and economic factors is doomed to failure" (in Getawaytoafrica.com, November 14th, 2000).

The question is *which agenda came first*? As Edmund Barrow and Marshall Murphree argue, the differences in objective, "critically shape the direction, content and processes of community conservation programmes" (1999: 51). However, before attempting to respond to that question, we need to understand another essential aspect of community conservation: land tenure. Land tenure is defined here as "the terms and conditions on which land is held, used and transacted" (Adams, Sibanda and Turner 1999: 1). Tenure is a key variable that determines the performance of community conservation initiatives (Barrow and Murphree 1999: 54; see also Lynch and Alcorn 1994: 373; Ntiamoa-Baidu *et al.* 2000: 62). The fact that the State is the legal owner of large areas of what it is considered communal lands in Southern Africa, tenure reform understood as change in those terms and conditions, depend on how this affect the interest of those with power and influence (Adams, Sibanda and Turner 1999: 1).

For Paul Harrison the first step required for good management of natural forests, particularly where immediate action is needed, is to change the relationship between farmers and their local forest (1987: 178). In other words, it is to shift ownership from the

state to the local people to whom the forests originally belonged, or at least the legal right to use, manage and protect the resource (*ibid.*: 178). The same point has been made by Marshall Murphree: "The unit of proprietorship should be the unit of production, management and benefit" (1991: 7). 'Proprietorship' is used here to mean a sanctioned use-right, including the right to decide whether to use the resources at all, the right to determine the mode and extent of their use, and the right to benefit fully from their exploitation in any way they choose (*ibid.*: 5). In this way the local community has the proprietorship of the natural resources concerned, but the state still retains the ownership (*ibid.*: 5).

Owen Lynch and Janis Alcorn conclude that: "In many countries, states are effectively executive committees of elites who make policies and laws enabling politically, socially, or economically powerful interests to use state and public resources for their own benefit. While states often allow community-based tenurial regimes to continue in areas where they do not presently conflict with these interests, they generally refuse to acknowledge their presence when they present obstacles to elite profiteering from natural resources exploitation, as in the case of timber sales to political allies" (1994: 390). Marshall Murphree argues that "for long-term sustainability CBNRM requires a fundamental shift in national policies on tenure in communal lands. The core of the matter is strong property rights for collective communal units, not only over wildlife and other natural resources, but over the land itself" (1995: 50). "For those relying largely on local rural resources for their livelihood, a secure place to live, free from threat of eviction, with access to productive land and natural resources are essential for rural livelihoods in the region" (Adams, Sibanda and Turner 1999: 2)

Referring to local people living on what is 'technically' state land, Marshall Murphree argued back in 1995, and repeated in 1999, in a joint work with Edmund

Barrow: "Their tenure is uncertain, their decisions on the use of resources subject to a plethora of conditionalities. As in colonial times, communal lands continue to be in various degrees the fiefdoms of state bureaucracies, political elites and their private sector entrepreneurial partners. The persistence of this condition into the modern post-colonial state is an indication that the devolution of strong property rights to communal land peoples is a fundamental allocative and political issue and that power structures at the political and economic centre are unlikely to surrender their present position easily" (Murphree 1995: 49; see also Barrow and Murphree 1999: 54).

From their review of issues involved in the examination of community conservation initiatives, Edmund Barrow and Marshall Murphree concluded that:

- "They cannot be adequately analysed without specification and examination of context".
- "They all have one common element - collective organisation and action by social aggregates at small social scale in the interest of conservation".
- "They vary widely in objective and in tenure conditions under which they operate".
- "They vary in their assignments of authority and responsibility, in the resources they address, in the organisational characteristics they exhibit and the mode through which they are implemented".
- "Comparisons between them can yield useful insights, but more analytically important is the issue of whether content, context, implementation and objectives effectively fit together. It is in this match that the promise of community conservation lies, and it is its presence or absence that most often determines its performance" (1999: 62-63).

We have seen that because of the high costs of maintaining 'fortress' conservation and in order not to lose control of the natural resources, many governments with support

from donors embarked on involving local people in natural resource management in exchange for sharing benefits to meet local people's needs. In the implementation of this new approach, community conservation and community-based projects have been externally activated and imposed onto local communities. Community participation has been used and manipulated to serve the conservation objectives and to create 'better' relationships between the ex-fortress conservation agents and locals, instead of actually enabling communities to enhance their own sustainable livelihoods. The people who have sustained the costs of conservation overtime became cheap labour to cut down the conservation agency costs and continue to be unable to shape the direction, content and process of the community conservation programme. Because of other political, social or economic interests, the governments have been very cautious in giving proprietorship rights over the land and natural resources to local communities.

All of the above create a lack of trust among the different stakeholders and may contribute towards a lack of social cohesion in society. A recent study undertaken by the Organisation for Economic Co-operation and Development (OECD) stated that: "Social cohesion can mobilise the energy of the population to get things done" (2001: 14). "Consequently, social partnership and consensus are important for sustained development" (*ibid.*: 14). Recently, the Word Bank also recognised that: "Increasing evidence shows that social cohesion – social capital – is critical for poverty alleviation and sustainable human and economic development" (2000: 1). Social capital is defined here as "the norms and social relations embedded in the social structures of societies that enable people to coordinate action to achieve desired goals" (*ibid.*: 1). Trust is one of the key resources identified to build social capital, foster people to accept and manage change, and ensure both the social order and the successful execution of people's expectations of social accountability (Falk and Kilpatrick 1999: 20). Trust should be seen also as the first step for

community participation building in community conservation programmes in order to ensure a real people's participation in the management of conservation resources and to link conservation goals to local development needs. Taken one step further, Ian Falk and Sue Kilpatrick suggested a definition "which defined social capital as being only those results of interaction which enhance well being" (1999: 22-23).

We can conclude that community conservation is the reverse of 'fortress' conservation, as it includes local people and their interests in its agenda. However, this review of the existing literature and experiences to date, shows that people have not yet been placed at the centre of integrated resource management, and may still be the 'loser'. To place people at the centre, as the main focus, would engage a new set of development priorities and, yes indeed, require greater responsibilities being allocated to, and assumed by, local governments and communities for conservation. It means attempts should be made by governments to enable the development of different forms of capital such as monetary and physical capital, but, particularly, efforts to develop social and human capital should be undertaken in order to consolidate the social cohesion and to evolve a rational resource use management practice in a collective action.

According to Marshall Murphree, what people need and want is not to be restricted only to maintaining subsistence standards of living (1991: 14). In reality, government and people, all sectors of society and individual households, seek to derive economic benefits from the country's resources. From the national down to the local level, there are extensive and diverse economic as well as other interests, such as social, cultural and political interests to be taken into account. All of these interests have to be reconciled in a way that can satisfy all of the stakeholders involved. The forest model in Canada is a large scale experiment in sustainable forest management involving extensive participation at the local level, comprising individuals and groups representing the various interests involved in a

particular forest area (Hall 1997: 15). This experiment shows that stakeholder partnerships, which are able to link the government, private sector and communities, can build a positive development initiative of mutual respect, but also of equity, and thereby create empowerment among the different actors involved in the decision making process (*ibid.*: 20-21). To reach such a positive development synergy, it is necessary to create compromises between institutional structures, in order to balance national and local, collective and individual interests, and to manage the common property, the natural resources. What is needed is to have "an environment where people with diverse social, economic, and political interests are capable of working together" (Auman and Johnston 1995: 168).

In reality what local people demand is to have the development of their livelihoods as the main objective, and conservation and resource management as a means to ensure the sustainability of their welfare (see also Barrow and Murphree 1999: 51). Their objective is literally *to meet their needs in the near future without compromising the ability of their children to meet their own needs.* And this is the essence of a sustainable development approach. Hence the hypothesis of this thesis, is that approaches to date have started with the wrong end of the stick.

1.3. Nature conservation versus people's development: an introduction to this thesis

We have seen that the orthodox development approach has been creating an environment crisis and ever more poor people in the world, two consequences which in turn interact and create a further downward spiral. Seeking solutions to the environment crisis should no longer be seen in isolation and perhaps the answer will be found in discovering solutions to other problems, related particularly to development and

specifically to poverty alleviation. A bottom-up approach to development has been identified as being necessary, in order to ensure the conservation of the environment and to satisfy people's needs. During the last two decades, community-based initiatives have been spreading in many countries, trying to ensure the conservation of the environment and promoting local development. However, in practice, people's participation, as an approach, has been used and manipulated mainly to achieve conservation goals instead of enabling local people to fulfil their own priorities and needs. Outsiders continue to dictate to local communities what they have to do. This, in turn, has created a tension between outsider-defined environment problems, and locally defined problems and solutions, as a result of the different agendas. Thus, there is a need for more innovative approaches, which can build social cohesion and collective action. In other words, approaches are required that ensure the development of both social and human capitals in order to bring economic and social benefits to all of society. Hence the OECD recent study concluded that: "Attention to human and social capital will help to sustain the well-being of future generations" (2001:71).

These innovative approaches have to be established in practice within a critical perspective distinguishing between reality and appearance. The reality is created by the people; however, generally in practice "this does not mean the acting self but the powerful people who manipulate, condition and brainwash others to perceive things and to interpret them the way they want them to: reality is constructed by the powerful to serve their needs (Sarantakos 1998: 36). The "reality is not in a state of order but of conflict, tension and contradictions, resulting in a constantly changing world" and appearance "is based on illusion and distortion" (*ibid.*: 36). We have to assume also a critical perception of human beings, that is, "humans have a great potential for creativity and adjustment" (*ibid.*: 37); however, they are "restricted and oppressed by social factors and conditions and exploited

by their fellow men, who convince them that their fate is correct and acceptable. Beliefs in such illusions create a false consciousness and prevent people from fully realising their potential" (*ibid.*: 37), which can perpetuate the existing inequalities and injustices. Already in 1848, Comte argued that "it is not God who makes people poor or rich but the social forces that dominate society" (in Sarantakos 1998: 3).

The doctoral thesis draws inspiration and analysis from the foregoing review of some of the key developments in the main body of the literature, and seeks to build upon these. This introductory chapter will now go on to identify the research problems that gave rise to this doctoral thesis, entitled Institutional Development for Community Based Resource Management, it will explain the central questions to be analysed, and the limitations to the scope of this study. Intentionally, the next section of this chapter is headed The communities' questions for analysis, precisely because most of the questions raised were suggested directly or indirectly, in a friendly or more searching way, by local people and their traditional leaders as well as by some of the author's research assistants and colleagues, during the period between 1994 to 1996 (Ribeiro 1995 and 1999 *Research notes*). At the beginning, most of the local level primary fieldwork meetings inside Mozambique ended with the following symbolic question being posed by locals to outsiders, particularly to provincial or central government officials: "Are you 'governing' elephants or people?"

There then follows a discussion of the research methods used in this development-oriented research which had three main objectives (Ribeiro 1999 *Research notes*). First, to contribute with our knowledge, lobbying voice and external contacts to help solve problems and improve local conditions according to local communities' priorities. Second, to develop where appropriate the confidence and competency of local people. Third, based on the experience gained during the local development process and from the local

knowledge acquired, to develop scientific knowledge that could be more widely disseminated to enhance new policy initiatives on community empowerment and development (see also Ribeiro *et al.* 1997: 2). This is action research, research in action (see Robson 1993: 430-444; Denscombe 1998: 57-67; Sarantakos 1998: 110-114). As argued by Colin Robson, "the 'action' stage is seen as an integral part of the research itself" (1993: 442). "The focus is action to improve a situation and the research is the conscious effort, as part of the process, to formulate public knowledge that adds to theories of action that promote or inhibit learning in behavioural systems" (Allen 2000: 1). According to Sotirios Sarantakos, the elements "that characterise action research are the personal involvement of the researcher, the emancipatory nature of the research, the active involvement of the researched, and its opposition to certain established policies and practices" (1998: 113).

Before reviewing the field research strategy applied to enable the local research agenda to be developed with local communities in the final section of this chapter, we move on to situate the challenges that the country faces in order to achieve poverty alleviation, the economic development of local communities and conservation of the environment, as it has been addressed to date by the government of Mozambique. It is essential to provide an overall country context for the thesis and this is the next section. As forestry and wildlife are vital to the sustainable development future of the country, we examine the existing policy framework for this sector in the following section. However, the greatest challenge continues to be how to raise people from poverty. We therefore go on to explore the nature of poverty in the Appendix of this thesis.

Chapter two will examine the experience of natural resources programmes of community management in Southern Africa, particularly in Botswana, Namibia, Zambia, and Zimbabwe, and more recently in South Africa, which joined these initiatives at a later

stage. This part of the research has been based upon an extensive literature search. This involved an analysis of the successes and failures of the CBNRM projects within the Southern African region. The aim was to draw upon the available lessons concerning how CBNRM could be implemented in the Mozambique context, a country whose history and development trajectory has inevitably been, in important ways, different from the other countries studied. The significance of the Southern Africa experience of community based wildlife conservation is the gradual emergence of a CBNRM philosophy and policy. In the words of Elizabeth Rihoy, the CBNRM programmes of Botswana, Namibia, Zambia, and Zimbabwe "represent a fundamental reversal of protectionist conservation philosophy and subsequent top-down models for development and resource protection" (1995: 13). However, it has been argued that the CBNRM model developed in the region can be a delusion if extended beyond areas where large photogenic wildlife, permit lucrative returns (Whiteside 1998: 5).

Mozambique also follows this trend as is demonstrated by the various projects and participant contributions to the two national conferences on CBNRM in 1998 and 2001. However, there are signals that community-based approaches as it is being implemented may not be the most appropriate approach for the sustainable development. Chapter three analyses the experience of the CBNRM projects in Mozambique, and examines how, if at all, they have contributed to economic growth in a sustainable way for the local communities, by helping to sustain the natural resource base. If the new policy approach is to be effectively introduced it is essential that the subject of the policy framework, the local community, be clearly understood and identified. However, identifying local communities is only one part of the problem, actually enabling community participation is entirely another. As Robert Chambers argues "most poor rural people seek first an adequate independent source of food and income under their control; or in other words, a secure and

decent livelihood" (1983: 145). This involves ensuring adequate stocks and flows of food and cash. This chapter will also explore the vital role that local institutions play in this process.

Chapter four will set out and analyse the newly defined role of CEF, the forestry research institution in Mozambique. CEF was created in 1985, within the Ministry of Agriculture, with a principal orientation towards industrial forestry for fuelwood and timber production on state owned plantations. Its role subsequently, has substantially been transformed, mirroring the massive changes in the development ideology and trajectory of Mozambique, which has taken place over the past two decades. The role of CEF now, is to undertake applied research in forest and wildlife management issues from a social and institutional perspective, in collaboration with the technical units of the Direcção Nacional de Florestas e Fauna Bravia [National Directorate of Forestry and Wildlife] commonly known as DNFFB. CEF is charged with developing policy and identifying appropriate management and technical solutions for natural resource management activities.

Chapter five will describe the two, local level, detailed Mozambican case studies selected for this doctoral research project. The first was in M'Punga where the Moribane Forest Reserve is located, in Manica Province, in the centre of Mozambique, and the second in Tanga Forest Area, part of the Licuáti ecosystem, in Maputo Province, in the south. Identifying local communities is one part of the problem; actually enabling community participation is entirely another. We will see that no community today exists in isolation and there are many political, cultural, social and economic links to the outside world, which obstruct the development of real community participation. Biodiversity conservation is also a priority of local communities if it brings a sustainable livelihood, however this objective has too often been used as a rhetoric for reducing conservation costs and maintaining the top-down approach to local development.

Chapter six will explore the experience and lessons to be derived from the two case studies selected and from the exiting literature and experience in southern Africa and in Mozambique in order to improve our understanding. It will attempt to analyse the role of local institutions, identifying existing weaknesses, and examine the rights and responsibilities of those currently involved and their insufficiencies. It also examines the resources available for such initiatives. This chapter pays particular attention to the concept of social capital and how important it is to build trust among the different stakeholders to have a collective action in achieving sustainable management of natural resources.

Chapter seven provides conclusions from the overall study and explores the implications for the country's wider development policy, if the local institutions are to be empowered. Through this analysis we explore whether local people have as yet been placed at the centre of integrated resource management. If the community's own agenda was indeed placed first, would this engage a new set of development priorities such as food security, health, education and personal security as well as access to the market? Furthermore, would it imply greater responsibilities being assumed by local governments and communities?

Community conservation projects were initially orientated to wildlife and related ecosystem conservation and few initiatives addressed other forms of natural resource utilisation. The use of other natural resources in a more integrated way may offer greater possibilities, but these need to be rigorously investigated. In most cases, local people are not managing their wildlife. They are managing the benefits, which are passed on to them by the government. What people demand may be the reverse of community conservation, it is likely to have the development of their livelihoods as the principal objective, and conservation and resource management as an approach to further the aims of sustainability. This thesis endeavours to interrogate the various CBNRM sustainable development

pathways put forward as the way to alleviate poverty, facilitate economic grow within the local community, and ensure conservation of the country's biodiversity.

1.4. The communities' questions for analysis

For many officials and agencies in Mozambique, CBNRM has been understood as comprising a combined series of social, economic, and ecological objectives, as well as a socio-organisational approach pursued within a broader political process and context. The overall objective of CBNRM pretends to accomplish levels of economic growth that will allow a sustainable, secure and decent livelihood for the population through the sustainable use of natural resources. The socio-organisational approach referred to, is rural or local community participation, where the local community can gradually set up its own processes to control its own resources and its own sustainable development.

However, some of the CBNRM project executing agencies have utilised the conception of people's participation as a 'fashionable' and 'practical' model to get funds from foreign donors to strengthen their own agencies and to ensure the accomplishment of biodiversity conservation objectives which they judge be the best for the country. To mention a lecturer at the Eduardo Mondlane University, in Maputo, Bart Pijnenburg, who has studied 22 projects using participatory approaches in Mozambique: "CBNRM can be regarded as another top-down approach" (1999: 6). The objectives of donors and the intervening agencies are often primarily focused on nature conservation or ecological sustainability and this may not coincide with the objectives of local people (*ibid.*: 6). "Objectives are often foreign to the 'supposed beneficiaries'. NRM may not be a priority for the local population" (*ibid.*: 6). Meanwhile, Simon Anstey argues that the quick shift into 'community conservation' by different actors involved in conservation in

Mozambique, was the best mechanism to utilise in order to secure funds and technical assistance at a time when the traditional sources of support were declining for financing conventional wildlife and forest management activities (1999: 145).

This institutional self-interest may carry the risk of thwarting and deceiving local people's expectations concerning implementing any one particular CBNRM project. Moreover, most of the existing projects involving community participation have been externally initiated by people with a very different background to that of the local communities involved, imposing their own external values, and frequently with the local community participation component only developed after the project had been approved. Such endeavours will delay the poverty alleviation process, frustrating Mozambican government policy efforts in this direction. If local communities are not really entitled to decide their own destiny and to chose how to use all of the natural resources in a more integrated manner, there is little chance for the country to advance upon a sustainable development pathway.

The author of this thesis was Director of the CEF, the research division for forestry and wildlife of the Ministry of Agriculture and Fisheries. Its role was to undertake applied research in forest and wildlife management issues from a social and institutional perspective, considering development policies and appropriate management and technical solutions for natural resource management activities. With this mandate, in October 1992, the author embarked upon his task to seek to develop a strategy to enable people, particularly poor rural women and men, to secure for themselves and their children more of what they want and need (Chambers 1983: 147) derived principally from forest and wildlife resources. An integrated form of development focusing upon local level management of natural resources and economic activity has been considered as a practical

means of alleviating poverty "*in situ* and in sympathy with custom, tradition and the environment" (Bartelmus 1994: xv).

The author's doctoral project emerged out of a community based resource management research project that was identified by CEF, and was jointly funded by the Ford Foundation and the International Development Research Center (IDRC) of Canada. It was initiated in 1994 by the author and his research team[1] without any preconceived ideas or models of what the project should be. It had the overall objective of encouraging rural development by undertaking research on the management, utilisation and conservation of indigenous forests and wildlife resources being implemented through community based approaches (Ribeiro *et al.* 1997). With the growing salience of the community conservation approach, and observing how it has been implemented in Mozambique, particularly following the first contacts made by project initiatives driven by this approach, with local people from different communities, a core dilemma was identified. Is the primary concern people or the wilderness, development or conservation? Addressing this dilemma is a central concern of this doctoral research work, which started later 1996.

In community conservation, we can identify two agendas: one, for most conservationists, is *to make nature and natural products meaningful to local people*, and the other, for local communities, is to reclaim control over natural resources and to improve their economic well-being as argued by David Western and Michael Wright (1994: 7). Community conservation is bounded to "those principles and practices that argue that *conservation goals* should be *pursued by strategies that emphasise the role of local residents* in decision-making about natural resources" (Adams and Hulme 1999: 19).

[1] The following members of CEF staff, António Serra, Camila de Sousa, Cândida Lucas, Cremildo Rungo, Esperança Chamba, Henrique Massango, Juma Juma, Pedro Clave, and Tereza Alves composed the research team.

The *objective in community conservation is conservation*, and the organisational approach through which to achieve this objective is community participation (Murphree 1994: 402). The italicised phrases are the author's emphasis to indicate the existing dichotomy in community conservation.

The central argument of this thesis is that what people demand is the reverse of the above. It is to have a positive development of their livelihoods as the main objective, but utilising conservation and resource management as an approach to sustainability. This thesis will firstly examine the experience to date of such a poverty alleviation policy objective amongst neighbouring states in Southern Africa and then within Mozambique itself, exploring the lessons to be learnt. Secondly, it will ascertain whether these new, popular and widely accepted projects purportedly based upon community participation are really improving the livelihoods of poor rural people in Mozambique. This thesis will explore the following research questions:

- What are the lessons of CBNRM initiatives or community conservation practices across Southern Africa. Are these applicable in Mozambique?
- Do these apply equally to wildlife and other natural resources?
- How can local communities sustain the resource base while undertaking the battle for economic growth?
- Do local institutions provide a legitimate and effective tool for natural resource use and management?
- What are the rights and resources as well as responsibilities that local people have in principle and what do they receive in practice?
- What are the implications for current national policy if local institutions are empowered?

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A critical analysis of these issues based upon a number of case study experiences can help to disclose the conflicts, tensions and contradictions that arise in examining these questions. On the one hand there may be a great development potential, but on the other hand there may be social factors and other conditions that prevent local people from realising their needs and wants. For instance, decentralisation for some government officials seated in Maputo represents a shift of power from the capital to the provinces, which means less power for them at the centre. Community empowerment may represent a further obstacle to development of the private sector, and so forth. As David Hulme and Marshall Murphree observe: "while community approaches promise to 'empower' communities they may be seen as threatening (to) those who will have reduced control over resources or flows of benefits" (1999a: 6). Henrique Massango, Field Manager of the Tanga Community Management Project in Maputo Province, Mozambique, in the Practitioner Profile interview of the Common Property Resource Digest (CPR Digest) said: "Decentralization and empowerment of communities sometimes are hot issues among some government people or agencies and their implementation has become difficult in the field" (October 1999: 11). Is the objective of the partnership between local government bodies and community leaders in mobilising and organising the local people to participate in the implementation of development projects (GOM 2000) really a bottom-up approach?

Sotirios Sarantakos argues that people "are confronted by socioeconomic conditions that shape their life; they are, however, also capable of assigning meanings to their world and act on it to change it" (1998: 38). People as creators of their destiny can fight illusion and the structures that support and promote it (*ibid.*: 38). There are many examples of this capability. Just to mention one, there was the long process of the people's struggle for the liberation of Mozambique from Portuguese colonialism, which culminated

with independence in 1975. The advantage of assuming a critical perspective is that it is "not just to present an alternative or to reduce the illusions inherent in social understanding, but to represent and explain what actually exists as authentically as possible" (Sayer 1992: 43). "Critical social science is an 'engaged' science, meaning that it assumes involvement and activism on the part of the researcher and theoretician. Researchers don't only study the reality; they act on it" (Sarantakos 1998: 38). Thus, critical social science encourages engagement and action with the objective of changing the conditions of people's lives, advocates emancipation and empowerment (*ibid.*: 38-40). "Social research, from this perspective, is seen as a critical process of inquiry that goes beyond surface illusions to uncover the real structures of the material world in order to help people change conditions and build a better world" (Mc Lennan 2000: 55)

To seek out the answers to these research questions the author used various methods of data collection (see Twumasi 1986: 24). Participant and marginal participant observation was employed (see Robson 1993: 197-198). An analysis of the literature on the community conservation experience in Southern Africa and in Mozambique was carried out, and two detailed local case studies were undertaken in Mozambique, to provide the body of the primary research work for this doctoral thesis. Due to the political character associated with action research, involving the political ideology of the researcher, people's participation and empowerment, the potential threat to central power holders it was not possible to complete all of the field research because it was 'neutralised' by some senior power holders in the Ministry of Agriculture and Fisheries. We turn to this in the next section. However, at this time, it is important to observe that the way in which this research was conducted challenged the political interests and the *status quo* of those individuals and of some local entrepreneurial groups more interested in immediate gain from the forest, namely timber of high commercial value. The author and his research team were

committed to participation and collaboration with local communities in solving local problems. The undertaking of this doctoral research demonstrated that there are influential people inside of the government, willing to sabotage and undermine such an approach. As Robert Chambers has argued, "the power and interests of local elites, more perhaps than any other factor, has been responsible for failures to benefit the poor" (1983: 163). Perhaps, the greatest challenge for the 21st Century is whether the rich and powerful will concede some of their wealth and power to benefit the poor and weak, without being forced by a countervailing power which is difficult and improbable (see Chambers 1994: 14).

1.5. Research methods

The research methodology chosen as being the most appropriate for this doctoral thesis is a qualitative methodology in a critical perspective. The subject of this thesis, institutional development, is a human creation and involves people interactions. The aim of this research is to try to understand the people involved in the development process, and to interpret their actions and choices from their own perspective and context. As discussed in previous sections, people create their social reality, however, it is the powerful who manipulate, influence and control others to perceive things and to interpret them in the way that serves the needs of the powerful. Thus, the social world is riven by conflict, tension and contradictions based on oppression and exploitation. However, people have a great potential for creativity and adjustment, an ability to create their own destiny. But they are 'enslaved' at the same time by social factors and conditions, and are exploited by their 'fellow' men, who convince them that this situation is correct and has to be so. The changes that are made are generally to better serve the interests of the powerful people.

The theory of qualitative methodology has greatly benefited from Husserl's phenomenology (Sarantakos 1998: 48-49). The social world is produced and maintained by people, however, people are not aware of this fact considering it as a natural phenomenon. There is a need to overcome this misapprehension in order to understand the essence of people and for them to gain consciousness of the reality, and thereby build a new order through their relationships, the 'transcendental ego'. Andrew Sayer has argued that "if it is recognized that part of 'the facts' about human existence is that it depends considerably on societies' self-understanding, that it is socially produced, albeit only partly in intended ways, and that changes in this self-understanding are coupled with changes in society's objective form", then the "knowledge can simultaneously be not only explanatory and descriptive but also evaluative, critical and emancipatory" (1992: 43). As described by Sotirios Sarantakos, the "critical science sees in social research the goals of removing false beliefs and ideas about society and social reality, perceives humans as creative and compassionate humans beings and is critical of the power systems and inequality structures that dominate and oppress people in societies" (1998: 39). As argued by Anne Mc Lennan, this "critical process will reveal the many truths of existence, their effects and the possibility of alternatives. It will reveal what people do not know about their situation, simply because they take it as given" (2000: 57).

Two of the key characteristics of the qualitative methodology is that it "tries to approach reality without preconceived ideas and prestructured models and patterns" (Sarantakos 1998: 46) and it "assumes that the social world is always a human creation not a discovery" (*ibid.*: 46, quoting Smith 1992: 101). "People differ from natural objects in their ability to interpret their own actions and those of others, to act on their understandings and to endow their lives and actions with meaning (Atkinson 1979: 46). "The social world of a particular culture is, therefore, *socially constructed*; it is the active accomplishment of

the members of that culture" (*ibid.*: 46, original emphasis in italic). Understanding actors, people's behaviour and their actions, events in their context, is one of the characteristics of qualitative research, which contrasts with most quantitative research (Murphy *et al.* 1998: 81; see also Sarantakos 1998: 46). As addressed by Murphy *et al.* the "emphasis upon context and holism in qualitative research leads to a style of research in which, rather than attempting to isolate and manipulate variables, as in experimental and, to a more limited extent, survey research, the researcher seeks to study the phenomena of interest within the wider context in which they occur. Participant observation, qualitative interviewing and the analysis of documents in relation to the circumstances of their production, are seen as having significant advantages in this respect" (1998: 81).

Although the qualitative methodology allows flexibility in the research process, potentially presenting a more realistic view of the subject, the potential weakness is greater subjectivity. To minimise the subjectivism a combination of subject-directed (Hermeneutics), object-directed (Ethnology), and development-oriented (dialectic) methods, and the use of existing quantitative data such as statistics, will be applied. The author's own experience and observation of CBNRM projects in Mozambique, particularly since 1994, will be also utilised. Denzin argues that participant observation should be seen as a field strategy that simultaneously combines analysis of documents from the past, collection of the census data, interviews of people and informants, direct participation and observation of ongoing events, and introspection (1970: 185-186).

The action research design adopted in this thesis is the most appropriate to test the hypothesis that genuinely empowering local people can best ensure the conservation of the country's natural resources and deliver sustainable human well-being to local communities. Conventional scientific research *i.e.* describe, understand and explain, may not test entirely the hypothesis because it may require changes in those people's behaviour who are directly

or indirectly involved in seeking improvement of the people's livelihoods, based on a sustainable use of the natural resources. As argued by Robert Chambers, conventional and professional methods are often inefficient in rural research and there is a need for approaches "which are open to the unexpected, and able to see into, and out from, the predicament of the rural poor themselves" (1983: 74). Long term careful investigation involving social and natural scientists, inventive work for improving and adapting, taking into account timeliness and cost-effectiveness, and a sensitive research "which shifts initiative to rural people as partners in learning, enabling them to use and augment their own skills, knowledge and power" (*ibid.*: 74) are the vital aspects in research on rural development.

Action research as a problem-solving approach, comes "to terms with the dual 'understanding' and 'promoting changes' roles" (Robson 1993: 438). "Thus, the action research approach seeks to influence the phenomena being studied during the action research process itself, in the belief that the true nature of social systems (social, cultural and institutional considerations) become most evident when you seek to make changes to them" (Allen 2000: 10-11). However, changes contain *per se* uncertainties and ambiguities that need to be clarified through an effective implementation process, which takes time (Robson 1993: 443). Often people need pressure to accept changes even in the direction they desire, but it is only effective when they are allowed to react and interact (*ibid.*: 443).

In 1946, Kurt Lewin who gave the name to action research, formulated it as being a spiral of cycles of planning, acting, observing and reflecting (Robson 1993: 438; see also Denscombe 1998: 60). Planning, the first step, is seen as starting with a general idea, however, it is desirable to reach a certain objective, provide an overall plan of how to reach the objective and require a decision on the type of action to be carried out during the second step (Robson 1993: 438). The next step comprises a circle of planning, executing

and fact-finding to evaluate the results of the second step and preparing the basis for planning the subsequent step and, perhaps, modifying the overall plan (*ibid.*: 438). A particularly interesting aspect of action research is that it can supply evidence that change is not worthwhile and maintaining the present situation is preferable, inasmuch as change is not the same thing as progress (see Robson 1993: 432). "In such circumstances, rejecting a proposed 'reform' is more progressive than accepting it" (*ibid.*: 432).

"The growing use of action research within environmental research and development initiatives explicitly recognises that natural resource management issues (such as biodiversity protection and enhancement) are not characterised so much by problems for which an answer must be found, but rather by issues which need to be resolved and will inevitably require one or more of the parties to change their views. The underlying assumption of these approaches is that effective social change depends on the commitment and understanding of those involved in the change process" (Allen 2000: 10). Furthermore, the "emphasis on a specific situation, of looking at practice in a particular context and trying to produce change in that context, puts action research firmly within the case study strategy" (Robson 1993: 439).

"The requirements for collaboration between researchers and practitioners, and for practitioner participation in the process, are typically seen as central to action research" (Robson 1993: 439; see also Denscombe 1998; 61). Collaboration and participation gave the political dimension to action research. Already, Kurt Lewin who wrote and worked just after the Second World War, saw action research as a mechanism for inducing democracy (Robson 1993: 439). "Later action researchers see it more as an embodiment of democratic principles in research. They have called for a direct involvement of practitioners in the design, direction, development and use of research, so that the conditions under which they work could be changed" (*ibid.*: 439). This democratic aspiration goes further. Research

may acquire dimensions "which can involve political action, involvement of respondents in the process of research and through this in political action as a part of the research process. This converts research practice to political action, or better to action research" (Sarantakos 1998: 110). Research can become a political instrument and a tool for social change (*ibid.*: 110) and challenge the political ideology and the *status quo* of those people centred in the core of an institutionalised system in different levels, from local to national and even international.

The risk with this political dimension embodied into action research is that it may be used in order to promote personal convictions and political interests (see Sarantakos 1998: 110-111). "In all cases, action research is based on the researchers' political convictions, initiates action-loaded investigation of social conditions, involves people, mobilises their forces, guides them to set goals, produces findings and follows them through until they are implemented" (Sarantakos 1998: 113). Apart from the variations regarding the role of respondents and the manner in which data collection is conducted, action research "employs the same type of research model other research types employ" (*ibid.*: 111) with "the purpose of emancipating, empowering and liberating" (*ibid.*: 61). This is "to expose real relations, to disclose myths and illusions, to remove false beliefs and ideas and to show how the world should be, how to achieve goals and how to change the world" (*ibid.*: 61). Another risk is the little impact that action research can have in the society. As argued by Robert Chambers, all research and action depend on the purpose, the costs, the alternatives, and replicability and impact (1983: 74). "The impact of research and action with and by the poor will be slight if it changes only one small microcosm at the periphery; it will be more cost effective if it spreads laterally or if it links back with and affects the cores of knowledge and power" (*ibid.*: 74).

Participant observation is used in this thesis as the principal method for data collection. Observation makes use of vision as its primary means of data collection (Sarantakos 1998: 207). Participant observation is a type of observation in which the researcher observes from inside the group (*ibid.*: 208), or as it was summarised by Murphy *et al.* "the researchers involve themselves in the settings they study" (1998: 99). The researcher collects data by participating in the daily life of the group, watches those situations in which people normally meet and observes how people behave in such situations, and learns the way in which people interpret events by studying their perceptions (Becker 1958: 652; Twumasi1986: 25). In going into local communities, the researcher has to adopt an appropriate field strategy and to introduce himself properly to formal or informal leaders, local authorities, traditional leaders and other prominent people in order to attain a sanctioned entry into the area and avoid being one more suspicious 'intruder' or spy (Twumasi1986: 25-26). Once there "he must learn their ways, understand their culture, fears and expectations, in order to fit into their setting" (*ibid.*: 26).

The key characteristic of participant observation for Emerson is "observation through regular *participation* in the naturally occurring activities of the social groupings being studied" (1981:351, original emphasis in italic). According to Denzin, the advantage of this method is also that "the participant observer is not bound in his field work by pre-judgements about the nature of his problem, by rigid data gathering devices, or by hypotheses" (1970: 216). Hence participant observation, as a method of field data collection in rural communities, especially in Africa, where the majority of the people cannot read and write, "is a suitable one" (Twumasi 1986: 29).

Rural people are both living in, and are part of the physical environment. The subject of this thesis is principally related to people and institutional development issues in relation to natural resource use and resource management. "Who benefits and who does not

benefit from the use of these resources?" is the key question that will be addressed in this thesis. Following Chambers, in rural development there are two aspects that need particular attention: "first, who benefits is affected by many decisions which appear technical or neutral; second, awareness of who gains and who loses is a precondition for realistic interventions to benefit the poor" (1983: 185).

Assuming that the social world of a community is the active attainment of the members of that community, the field research strategy adopted in this study was to join a local community without preconceived ideas and models with three main objectives. The first was to understand local people involved in their development process in their own natural environment. The second was to interpret their actions and choices from their own perspective and context. The third was to understand how to build new order through a collective action that can link the local and national development agents. In going into local communities, the author and his research team firstly introduced themselves to the local authorities and traditional leaders, and other local influential people in order to attain a sanctioned entry into the area and avoid being regarded as suspicious intruders.

The author has also assumed that a good social relationship may create trust, which leads to a better collaboration instituting a real partnership and smoother adaptation to change. For different reasons, as we will see in Chapter five, it took about two years for this research initiative to be accepted by the communities living in the case study areas. This is a very time consuming process (see Pijnenburg and Nhantumbo 1998: 11; Jones 1999: 296), and sometimes created frustrations among those engaged in such research that they could not be as proactive as they would have desired (Ribeiro 1999 *Research notes*).

In each case study area, as we will see in the next section, camps were built in order to permit the regular presence of the researchers, for them to become known by the local people and to permit the creation of social relationships with members of the community,

and to observe more easily the activities of that community. The underlining idea of this strategy was that the researcher did not have scheduled visits which could disturb peoples lives, nor have a special programme, nor influence the benefits that the community might receive (see Chambers 1983: 199).

Figure 1. Smile of trust or of convenience?

Mr. Nhangambire M'Punga, *Régulo de M'Punga* [M'Punga chief], with the author after a meeting with the research team. Photo taken in the *Régulo*'s home, in Moribane Forest Reserve, District of Sussundenga, Manica Province, Mozambique, in January 15th, 1998

This photo, Figure 1, was taken by one of the research team. Although it is out of focus, the smile of friendship and trust which is clearly visible, is the result of two years work with M'Punga community. In the beginning, Nhangambire M'Punga, the M'Punga local chief, refused point blank to meet the team and even when he eventually decided to meet the team and informed them of this, he postponed encounters for a further six months (Ribeiro 1999 *Research notes*; also in Lucas 1999: 2-3). It is noteworthy to mention here

that he was appointed as traditional chief by Renamo during the war. This added greatly to the complications of the field research, as the research was perceived as coming from the capital city government under Frelimo's control. We turn to examine this aspect of the research in greater detail in chapter five.

The field research data consists of three field note files, Microsoft Word, compiled from October 1992 to March 1999, written during and after the field visits. The data used in here and the field notes are available in the archives of CEF. The author never used a tape recorder nor paper and a pencil openly when talking with local people in order to avoid inhibiting their responses. The author's considerable previous experience in conducting government surveys and questionnaires in Manica, in the 1980's, confirmed that rural people easily became suspicious and did not trust someone who started to take notes. Mozambique was after all in a civil war situation. Prudence is needed from the participant observer in this regard if truth is the objective (see Twumasi 1986: 27). Rural people can hide the truth even when telling the number of domestic animals that they have. This is because they do not trust the government and do not know for what purpose and for who this information will serve. "The flow of the conversation will be interrupted; an artificial social environment will be created and sometimes the people will begin to grow suspicious about the activities of the observer. For these reasons, the researcher must take a mental picture of what goes on to enable him to record his observation as soon as he leaves the observational scene" (Twumasi 1986: 27).

The notes, the records of the daily events and interviews, were taken when the researcher was alone in his room or during debates and analyses of the fact findings with the research team. It is important to create the habit of recording research notes from daily activities (Twumasi 1986: 27), which is not always an easy task. After each period of field research, the author rewrote and annotated the notes and developed them into the Microsoft

word document. By not writing notes in the presence of locals prevented inhibiting people talking, but frankly it was often difficult to remember all of the details that occurred during the day, particularly when the day was so full of events and interviews and conversations. In order to overcome this problem at the end of the day there was frequently a meeting with other members of the research team. These meetings not only served to recollect any important missing details from the primary research data collected, it is also served to begin the analysis of the field data. Furthermore, it helped to create a common understanding of the local problems, which permitted the development of a collective action plan within the research team.

Participant observation involves a combination of two research methods, direct observation and interviewing which is informal (Twumasi 1986: 28). Most interviews were undertaken naturally and on an appropriate occasion, during the day or evening, with local people in many different circumstances. It is interesting to note that the subject of conservation and development, and how these related to people's lives, were more easily discussed in an informal social environment such as during meals, meeting and drinking with people after the working day, and around the fire at night when stories come out with messages. In fact, the informal discussions with people at different levels in the evenings with a can of beer probably generated more data and results because the informants began to feel more relaxed with the author and started to speak freely as a friend. For the author, these local informal discussions can be seen as the same as a lobby for action, such as often happens in many social settings such as in five star hotels elsewhere in the world. In all interviews carried out by the author, an interpreter was used for the local language, normally the interpreter was a member of the local research team. On a few occasions the author used Portuguese and English as a language to communicate directly with local people.

As Director of a forestry and wildlife research institution and 'Coordinator' of the research team, the author was able to be a participant observer and employ the research methodology of participant observation at different levels of decision-making and managing change. These circumstances facilitated a unique opportunity to gain access not only to field research and primary research material from local communities but also to access primary research material from government, international and non-government sources and, during the first years of this research, to be both observer and observed. As research was tied to the management of change and carried out by the same person, there was a commitment to translate the research findings into action and thus "the question of allegiance becomes problematic" (see Ong 1989: 515).

"Research is not maintaining the status quo, neither is it purely serving an advocacy role. Research is used to implement change that is defined by both researcher and all the parties involved, and therefore needs to reconcile within it the various (contradictory) interests" (Ong 1989: 515). For this to be successful there was a need for openness, incorporation of other people's experiences, and encouraging decision-making that involved sharing. This may not facilitate the search for a new knowledge but, nevertheless, can contribute to understand local people and their political, social and economic limitations, and how to achieve in practice a sustainable livelihood in the Mozambique context.

In the final years of this research, in March 1999, individuals in the Ministry of Agriculture and Fisheries denied any further support for this project and the author's research, including cancelling the grant given by the Ford Foundation to facilitate this research. Subsequently the author left his post to continue to write this doctoral thesis, financed from his own means, and has been able to gain substantial additional insights through the subsequent period of detachment and analytical reflection upon the experience.

The circumstances surrounding these events, as described in Chapter Five, served to confirm the reluctance by some officials at the central government, namely at the new Ministry of Agriculture and Rural Development, to move away from a top-down approach to development.

In order to situate the wider challenges that the country faces in regard to poverty alleviation, the development of local communities and conservation of the environment, it is essential to provide on overall country context and it is to this that we now turn.

1.6. Country profile

Mozambique, with a total land area of 799,380 km2, has 16.1 million inhabitants, with 71.4% of the country's population living in rural areas and with an annual rural population growth rate of 2.2%, as revealed in the results of the August 1st 1997 census by the Instituto Nacional de Estatística [National Institute of Statistics] referred to as INE (1999). In addition to this huge rural community of whom 92.7% depend directly on natural resources for food, shelter and income, 41.0% of the labour force from the urban areas is also engaged in agriculture, forestry, and fishery production (INE 1999).

The country has about 36.4% of its inhabitants economically active, defined by INE as being that group of people aged fifteen years old and above who either work or seek employment (1999). The census data reveals that about 80.9% of the economically active population are concentrated in agriculture, forestry, wildlife, and fishery activities. The remaining economically active population are located in services 11.1%, industry 3.0%, construction 2,0%, transport and communication 1.2%, mining 0.5%, energy 0.1%, and others 1.2%. In addition, 28% of children between seven and fourteen years old share in the working process, particularly in the rural areas (INE 1999).

Mozambique is thus essentially an agricultural economy, with most of its workers engaged in subsistence activities. Research by the Environment Working Group (GTA) confirms that the majority of Mozambican people derive their livelihood exclusively from the land (1990: 39). But only about 9% of the inhabitants use some kind of equipment beyond the most basic rudimentary tools to cultivate the land and only 2% use fertilisers (Mocumbi 1998: 1).

According to the Prime Minister of Mozambique, Pascoal Mocumbi, 69% of inhabitants live below the poverty line, and 82% of the poor are located in rural areas making the poverty in the country predominantly a rural phenomena (1998:1). The Gross Domestic Product (GDP) per capita in 1996 was US$185.8, and in 1998 US$236.9, with a growth rate of more than 10% per year (INE 2000). However the rural people are the slowest to benefit from this recent economic growth in per capita income.

Although former United States President, Bill Clinton, identified Mozambique as the world's fastest growing economy in early 2000 (2000: 2), the country is still viewed by the international community as one of the world's poorest countries, and it remains greatly dependent on foreign donors. One of the reasons for the high growth rate compared to other countries in the developing world, is the fact that it was the poorest country in the world in the early 1990s. But the civil war has now ended and the country has embarked upon an economic revival strategy. The reasons for the country's poverty are traditionally explained as being the result of patterns of underdevelopment dating from Portuguese colonisation, the destructive period of war after independence, and the country's vulnerability to natural disasters such as drought and flood.

Natural disasters continue to impede the revival of the country's economic fortunes. For instance in February 2000, abnormally heavy rains in southern Africa, along with the tropical cyclone Eline, caused extensive flooding and submerged immense areas of land,

ravaged much of the country's infrastructure, and produced more destruction than the war itself over vast swathes of land in the south of Mozambique (BBC News 24/02/2000). In March 2000, the President of Mozambique, Joaquim Chissano, confronting the disaster was forced to appeal for about US$250 million to rebuild the economy of the country (BBC News 08/03/2000). Apart from the loss of lives, homes, roads, bridges, railway lines, and electricity transmission lines were washed away, as well as crops ruined. Mozambique lost 80% of its cattle according to United Nations' World Food Programme estimates (BBC News 08/03/2000). Cattle are the principal cultural and economic asset for many rural people in the south of the country. With the floods, they have lost the domestic reserves that they possessed to deal with contingencies. Cattle are effectively a family's savings scheme.

Mozambique is located along the eastern coast of southern Africa, with a 4,330 km borderline and over 2,470 km coastline. Within the broad geographical limits of latitude 10° 27' S to 26° 52' S, and longitudes 30° 12' E to 40° 51' E, it falls between Tanzania and South Africa, and is adjacent to the Mozambique Channel to the east. The country outline of Mozambique resembles the letter "Y". Progressing in an anti-clockwise direction, the country shares borders with Tanzania in the north, Malawi, Zambia, Zimbabwe, South Africa, Mpumalanga province, and Swaziland in the west, South Africa, province of KwaZulu Natal, in the south, and has the Indian Ocean to the east. The Mozambique Channel, an arm of the Indian Ocean, separates the country from Madagascar, which lies opposite.

The landscape of the territory is essentially coastal lowland, with uplands in the centre, high plateaus in the northwest and mountains in the west, with Mount Binga, the highest point, situated on the border with Zimbabwe. Numerous rivers traverse the country notably from north to south, the Rovuma, Zambezi, Save (Sabi), Limpopo, Incomati

(Komati), Umbeluzi and Maputo. As a result of the country's geographical location, shape and topography, there are various climates, from tropical to subtropical, from semi-arid to high rainfall, thus creating a variety of natural ecosystems.

The land is covered with various forms of vegetation ranging from grasslands to closed forests, from savanna to woodlands, open or secondary forests, depending on the natural environment and the degree of human intervention. The particular forms of vegetation have been shaped by people's struggle for survival (GTA 1990: 64). These different types of woody vegetation are commonly called natural forest in Mozambique. Therefore when the term 'natural forest' is used here, it refers not only to the ecological system composed of forests and/or scrub, and the related flora, fauna, climate and soil conditions, but also to the effects of human activities overtime.

As in many other countries, Mozambican forests have been cleared in part to facilitate agricultural production in the form of shifting or permanent cultivation, for subsistence or cash crops and pasture. The *machamba* [peasant farm] is considered by INE as being the basic unit of agricultural land use and the social unit for the organisation of the rural household's work (1999). The *machamba* is associated with shifting agriculture, which means rotation of plots after several years, systematically employing slash and burn methods for clearing the new land as well as land preparation for the new season. It is essentially rain-fed agriculture and involves growing basic staple foods such as maize, rice, cassava and sorghum, and some cash crops principally cashew nuts, coconut palms and cotton (GTA 1990: 68).

Natural forests and miombo woodlands have also been the main source of fuelwood, comprising firewood and charcoal, and also they provide round wood for construction, providing poles for building, fencing and so forth (GTA 1990: 35; Ribeiro 1992: 37). About 80 percent of the energy consumed in the country comes from woody

biomass, as estimated by DNFBB (see also GTA 1990: 33; Ribeiro 1992: 37; DNFFB 1996: 2).

Natural woodland still provides the main source of house building material for most of the rural population (DNFFB 1996: 2). It is noteworthy here that 93.9% of rural families live in a hut made with local materials and 92.9% of the huts are covered with a thatched roof made from grass, reeds, and palm leaves (INE 1999). Even in the urban areas, huts are also very common with about 61% of households living in a hut made from local materials (INE 1999).

Approximately 80% of the country's population use wildlife meat and fish as their principal source of animal protein (DNFFB 1996: 2). In addition to subsistence hunting, an open market in game meat flourishes in the countryside, primarily along the roads, as a result of the government's inability to control hunting (*ibid.*: 5). Forestry and wildlife are therefore essential to the sustainable development future of the country. Hence we turn next to examine the existing policy framework for this sector.

1.7. Policy framework for forestry and wildlife

In recent years, the DNFFB, within the Ministry of Agriculture and Fisheries, has been exploring whether community participation will be a feasible strategy to conserve and protect forestry and wildlife resources from illegal cutting, hunting and fires. The DNFFB is the Mozambique government's division responsible for implementing sectoral policy concerning forestry and wildlife resources, with a mandate to protect, develop and promote the sustainable use of resources (DNFFB 1996: 7). The DNFFB mission statement is "to contribute to social, ecological and economic development of the country by means of

protecting, conserving and utilising on a sustainable basis the forest and wildlife resources" (*ibid.*: front cover).

The DNFFB' strategy *recognises that if the existing level of consumption of forest* and wildlife products is to continue, sustainable use and management of the resources will be required (1996: 2). After several regional and national workshops and seminars with participants from central, provincial, and local government, the private sector, non-governmental organisations, and rural communities, from the north to the south of Mozambique, during the period from 1991 to 1996, the Forest and Wildlife Policy and Strategy (DNFFB 1996) was finally concluded. This document is reflected on the National Programme of Agriculture Development, common known as PROAGRI, elaborated by the Ministry of Agriculture and Fisheries (MAP), for the period between 1998 and 2003 (MAP 1998). One of the medium-term strategic objectives defined for forestry and wildlife development was "to increase the participation of the *rural communities, as direct agents and beneficiaries* in the integrated management, fire protection, use and conservation of forest and wildlife resources" (DNFFB 1996: 12; see also MAP 1998: 67). The italicised phrase is the author's emphasis to indicate the primary focus of the present strategy. Without the active involvement of rural communities it will not be possible to reverse the present trend of illegal cutting, hunting, and starting fires to clear land. The state, through the DNFFB alone, does not have the staff, facilities, equipment and resources to enable it to enforce the current laws (see MAP 1998: 23; Mushove 2001: 1; Paupitz 2001: 3).

According to DNFFB its overall long-term goal is "to protect, conserve, utilise and develop forest and wildlife resources for the social, ecological and economic benefit of present and future generations of Mozambican people" (1996: 10). Three specific objectives have been established in three realms:

- Social - address the role of these resources in alleviating poverty, and in increasing the participation of communities in the management and use of the resources;
- Ecological - this aims at the protection and conservation of the resources, and highlights the contribution of forest resources in the maintenance of soil and water resources, biological diversity and other environmental benefits; and
- Economic - this aims 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 the Treasury through their efficient revenue collection (*ibid.*: 10).

Fulfilling these long-term objectives means that forestry and wildlife development has to be based on sustainable resource use. DNFFB is also committed to support applied research, needed for the development of new social and technical approaches for community resource management (1996: 12), as well as to implement schemes that will:

- Promote and enable the development of community resource management regimes involving recognised communities, and which reflect the role of women;
- Introduce mechanisms that progressively empower communities by
    - affirming existing customary rights and ensuring exclusive access to natural resources in customary areas,
    - permitting the sustainable commercialisation of these resources for community benefit, and
    - providing concession arrangements with government;
- Involve the rural communities in the management of the State Protected Areas; and
- On the basis of its accumulated experience in these schemes, DNFFB will develop proposals for further enabling legislation (*ibid.*: 13-14).

Within this policy framework, and with the aim of improving the living standards of the local communities involved in the sustainable use and management of natural resources, a number of research and development projects have been implemented by different governmental and non governmental organisations. These projects have been implemented within different settings and with varying degrees of local participation, as we will see on Chapter Three. One common aspect of almost all of rural people and communities in Mozambique is the subsistence character of their existence and extreme dependence on the natural resource base: most rural communities live in poverty. The greatest challenge remains how to raise people from poverty and we examine the nature of poverty in an Appendix of this thesis. We turn now to review the research strategy applied to enable the local research agenda to be developed with local communities.

1.8. Enabling the local research agenda to be developed with local communities

In this thesis a different approach to community participation is explored. Most of the existing projects involving community participation have been externally initiated by people with a different background imposing their own values, and the local participation was only developed after the project had been approved. The focus of the research programme for community based resource management was undertaken with the perspective of building up a long term relationship with the target communities and undertaking local long term research observations, being careful not to impose any outsider values on the local communities (Twumasi 1986: 53; see also Harrison 2001: 187). Here, it is important to note that "people act on the basis of what they believe to be true rather than what may be objectively true" (Murphy *et al.* 1998: 88).

This field research strategy was intended to permit a building of trust between CEF staff and members of the local community in order to provide a flow of real and first hand information, and to study the events as they occur in its social and natural environment. Moreover, as Murphy *et al.* comment, as the researchers' presence becomes more familiar to local people the natural barriers and the uneasiness and/or caution towards talking to outsiders is likely to disappear (1998: 107). According to Graham Harrison, local people are highly conscious of their own marginality in different senses. "Marginality with respect to state power, marginality compared with urban areas, economic marginality, and even marginality on a global level in which Europe/America/South Africa are constructed as remote and wealthy lands" (2000: 22). As he argued, returning to the same villages would persuade some that the researcher is "not merely a 'development tourist', arriving, gathering data, and leaving" (*ibid.*: 22), and by the author's first field observations, regular returning is an imperative in order to gain a better understanding of the people, both their life in the periphery and their lands, which is impossible to achieve with only one short visit. The underlying assumption for this strategy, as argued by Will Allen, is "if people work together on a common problem 'clarifying and negotiating' ideas and concerns, they will be more likely to change their minds if their 'joint research' indicates such change is necessary" (2000: 10). A real collaboration "can provide people with the interactions and support necessary to make fundamental changes in their practice which endure beyond the research process" (*ibid.*: 10).

The early stage of the doctoral research involved identifying and then building up long term contacts with target communities. In 1995, CEF had extensive contacts with communities from Rotanda, Mavita and Moribane areas in the District of Sussundenga, Manica Province (Ribeiro and Chavane 1995: 2). Those contacts led to the selection of the M'Punga community in Moribane forest reserve for future work (Ribeiro and Chavane

1996: 2). Three main reasons were behind this selection. First, Moribane forest reserve offers a great potential for ecotourism. Second, it is a buffer zone for the Chimanimani project, one of the Transfrontier Conservation Areas (see Ribeiro and Chavane 1995: 2-3, Sousa, Juma and Serra 1995: 7). Third, it is close to Sussundenga Forest Research Station.

Figure 2 shows the M'Punga approximate location. Several visits to the area, contacts and meetings were undertaken by CEF to establish lasting relationships and to build trust between CEF staff and members of the local community. Later in 1996, a preliminary social and ecological survey was carried out in the area. Some of the community's problems were identified, such as the presence of land mines, the lack of a market for the sale of bananas and maize, the lack of a maize mill and the absence of a school and a health centre. In order to produce immediate benefits, validate the role of CEF, strengthen the mutual relationship and build trust between CEF staff and members of the local community, a grinding mill was purchased for the community. A Participatory Rural Appraisal was done in 1997, and a planning workshop was held in January 1998, to identify the development goals and the framework for the project activities.

Figure 2. Map of Manica Province.

The red arrow indicates the approximate location of the M'Punga community in the Sussundenga District. For detailed location see Figure 6. Source: http://www.mozambique.mz/mapa_cen.htm

Because of the lack of resources and difficulties in transport at the beginning of this research initiative, CEF chose a second community in Maputo Province closer to the home

base of the research team (Ribeiro and Chavane 1995: 2; and 1996: 2). This gave a comparative dimension to the study. During a tree seed collection initiative, CEF identified *Chanfuta* (*Afzelia quanzensis*) seed sources in several forest areas in Maputo Province. Tanga area, Figure 3, in the District of Matutuíne, presented the best *Chanfuta* stands (John 1996; Alves, Massango and de Sousa 1997: 2) and the local community showed a good sense of forest conservation (Alves, Massango and de Sousa 1997: 28-32) and was worried about illegal cuttings by outsiders, principally *carvoeiros* [charcoal producers] and *Chanfuta*-oriented loggers (Ribeiro and Chavane 1997: 3).

Figure 3. Map of Maputo Province.

The red arrow indicates the approximate location of the Tanga community in the Matutuíne District, and the green the CEF's headquarters in Maputo Province. For Tanga detailed location see Figure 8.
Source: http://www.mozambique.mz/mapa_sul.htm

Tanga forest is part of the Licuáti forest ecosystem. Licuáti, which is a small relic left from the destruction of the previous forest (Ribeiro 1992: 89), is the last forest ecosystem in the south of the country with social, economic and ecological importance. The importance arises not only as an income source for the local communities, but also for research and conservation of endangered habitats and species. In 1996, CEF conducted several surveys, visits and contacts with local community members in order to establish relationships (Ribeiro and Chavane 1997: 3). A participatory rural appraisal was also undertaken by CEF to identify the local wants and needs, problems and priorities of the selected community (Alves, Massango and de Sousa 1997). A planning

workshop with members of the community and other stakeholders was carried out to clearly identify development goals, project objectives and project results (CEF 1997).

Later the author perceived that the participatory rural appraisals and planning workshops undertaken in the two case study areas had created some expectations of economic benefits from the 'project' amongst some community members, particularly the formal and informal local authorities, even at the provincial level (Ribeiro 1999 and 1999a *Research notes*). For instance, in January 1997, when the author was discussing with provincial authorities the existence of land mines and the need for demining one of the forest areas, they requested financial support from the project for the work of clearing the area. Nevertheless, there was a provincial programme for the mine clearing, which could have included that particular forest area.

In selecting these two communities, the following criteria were employed. Firstly, the community had to have some kind of internal organisation to facilitate the development of institutional capacity in resource management. Secondly, the community had to have economic potential. This means that the existing natural resources in the community area had to be of a relatively high value, and/or have easily identified income generating projects which could focus on the exploitation of the available resources, which would facilitate economic development (Murphree 1991: 14). Thirdly, there had to be accessibility, and in particular easy access for the market. The fourth and most important criterion, was a willing acceptance by the community, demonstrating a commitment to the project. These two communities are part of the community based resource management research project that was identified by CEF.

The decision to select these two communities as the case studies for this doctoral research was made in January 1997 after the traditional leaders and some community members, and local and provincial government authorities and CEF staff been consulted.

The author believed that he had influence in the two project areas and could expect little interference from outside the community, particularly from local government. This selection was *de facto* a continuity of the CEF project of which the author was the coordenator, and had support from the Ford Foundation and IDRC, which could provide some material inputs to stimulate the local development being identified. The author was also well known in those areas and could easily begin field observations and participate as a facilitator in any action required by the community. Although operating at different stages of project implementation, these two communities offered a chance to see how community participation could be developed in areas where traditional authority exerted a strong influence on community members.

In both places, Moribane and Tanga, a camp was established in the community area to accommodate the CEF staff, and to receive visitors from universities and other national and international research institutions, while undertaking their field work, see Figure 4 (Ribeiro 1999 and 1999a *Research notes*). In order to cope with the local rules for newcomers in the M'Punga community, the traditional chief was contacted to allocate a place for the camp. After traditional offerings and ceremonies to communicate to ancestors what was happening, the camp was bedded-down into the area. Improved huts were built in those camps according to the micro milieu, with minimum disturbance of the natural vegetation. It was constructed with local materials and utilised local technology, displaying some of the traditional house building culture of the community.

To bring some of the modern comforts and conveniences to attract the urban based researchers to remote and 'wilderness' area, these new huts were larger than the local ones, with internal walls surfaced, with cement layer rendered and cemented floors, and some of the huts had en-suite toilets. The outdoor bathroom was built along local traditional lines but with a solar powered hot shower. The living and dinning rooms, and bar, were built in

a different hut for the rainy days. The kitchen was the same as the local ones. In Moribane, solar powered energy was established for some lamps and for the use of a computer and television, allowing the researcher(s) to work or have some leisure at night (Ribeiro 1999 *Research notes*).

Figure 4. Moribane camp, in M'Punga community area

Moribane camp, a Field Station in Moribane Forest Reserve, set up in 1997/98, by local people with local material exposing the traditional house building culture, with few additional attachments of modern comfort and conveniences to attract researchers, visitors and tourists. Photo: Ken Wilson, Mozambique Programme Officer for the Ford Foundation.

The fundamental idea behind building the camps, was to initiate actual research and development on the ground. On the research side, the main idea, as suggested by Robert Chambers, was to establish an attractive place where researchers could stay and sit, ask, listen and learn from the poorest, learn indigenous technical knowledge, identify and carry out a local research agenda for local development and learn by working together with local people (1983: 201-208). In other words, as proposed by Barry Munslow *et al.*, "beginning

from the word 'go' and lasting right through every stage of the process" (1988: 150). In these permanent camps, the researcher(s) may smoothly create social relationships, learn more about the local community, gather first hand information through direct contact with local people, be long-term, participant and/or naturalistic observers, take interactive-reactive and holistic approaches, which are the main characteristics of people based research (Sarantakos 1998: 198-199).

This strategy of building field stations also allowed CEF to begin with concrete field research projects and to enter into joint collaboration with other research institutions such as happened with the University of Sussex. Some of the research findings in M'Punga by the Management of Renewable Natural Resources (Marena) research team have been summarised and published in a thematic briefing in March 2001. This Briefing is one of a series produced jointly by the School of African and Asian Studies, University of Sussex, UK, the Forum for Social Studies, Ethiopia, and the Centro de Experimentação Florestal (CEF), Mozambique. The Marena research project, initiated in 1998, was funded by the UK's Department for International Development.

For local people, these camps, which combine modernity with local tradition, see Figure 4, offer a good example of forms of economic activity that require few inputs from outside the community but which could bring national and international tourists to contemplate and enjoy the surroundings which the local community also enjoys and from which it might benefit. For the M'Punga community, strong potential outside interest in the Chimanimani ecosystems, the possibility of viewing Mount Binga, the highest mountain in Mozambique, and the varied flora and fauna of the Moribane Forest Reserve could bring in tourist revenues. Zimbabwean tourists could stop on their way to or from Vilanculos and the Bazaruto archipelago, given the location of the reserve on the route between the

Zimbabwe border and Vilanculos. There is the possibility of developing a local tourist industry.

The same opportunities exist for the Tanga community. In this case, bird watching and cultural tourism offer the potential to develop local economic activities requiring low investment (Ribeiro, Massango and Chamba 1998: 3). This potential includes many species because of the diverse forest, grassland, and wetland habitats. According to Carlos Bento, 85 bird species have been reported (1998). The ecotourism of this type and on a small scale would have minimal conflicts with other livelihood activities in Tanga and would be unlikely to damage the fragile environment or the local society (Ribeiro, Massango and Chamba 1998: 3). The provision of income, jobs and opportunities to sell goods and services on this scale is significant, given the small size of the Tanga Community, only 62 families, and these could complement other activities (*ibid.*: 3).

On the development side, a pleasant and enjoyable place would be constructed where outsiders could stay, who could bring new ideas and inputs to help initiate economic activities for the community's own development efforts.

Community-based initiatives have been targeted within the Mozambique government policy framework as an essential dimension in the struggle to overcome poverty. It is to this aspect that we turn in the next two chapters, the regional experience and that of Mozambique.

Chapter Two

Regional experience in community conservation

"While governments have granted some control over wildlife to rural communities. . . . in some cases, wildlife elites rather than groups of people have been empowered" (Chigoya 1999: 6).

Throughout the 20th Century, a substantial displacement of local people from their lands occurred in the name of the conservation of nature. Because of the failure of this paramilitary approach to conserving biodiversity, a new strategy has been adopted. Local communities have been encouraged by outside agencies to work together to protect their wild species and associated wilderness habitats. It is now accepted that for this to succeed, "biodiversity conservation must coincide with resource uses that provide tangible benefits to local people" (Ntiamoa-Baidu *et al.* 2000: 61). In this chapter we will examine two decades experience of community participation in environment conservation in Southern Africa. It is proposed to explore how this experience has been implemented in practice and to explore what lessons there might be for the Mozambican context, which has its own specific history, development trajectory and environmental conditions.

"CBNRM programmes typically focus on providing rural communities with strong proprietorship over their land and resources, establishing or strengthening existing community resource management institutions, and strengthening community organizational, institutional and resource management capacity" (Jones 1999: 296). Although not exclusive to wildlife, CBNRM projects were initially strongly orientated towards protecting wildlife and it is the argument of the next section that very few initiatives address other forms of natural resource utilisation. The following section examines the new regional issues created by transfrontier conservation initiatives. It is essential to explore in reality whether people actually have the rights to use the natural resources or to receive the benefits promised from community conservation initiatives and this is explored in a following section. In the final section of this chapter we review the sustainable use of forest resources which may offer other possibilities for local development.

2.1. Community initiatives versus sustainable wildlife use initiatives

The Southern Africa Sustainable Use Specialist Group of the IUCN Species Survival Commission (SASUSG) made a clear exposition of their version of the existing natural resource 'puzzle' of the Southern Africa Region:

> **"Resource regimes within our region are characterised by increasing human populations with heavy reliance on natural resources, and**
>
> **This is exacerbated by distorted valuations of resources, inappropriate allocation of the costs of maintaining and the benefit of using natural resources, and inappropriate tenure and ownership structures,**
>
> **All of which lead to unsustainable forms of land use and natural resources harvesting which result in degenerating ecosystems characterised by**
>
> **Declining productivity, declining biodiversity, reduced availability and quality of water, deteriorating aesthetic quality of landscapes, resulting in impoverished peoples and ecosystems" (SASUSG 1997: 5).**

The people of Southern African are predominantly rural and their livelihoods have long been derived from, and are inseparable from, the environment (SASUSG 1997: 17). A recent study of poverty in Botswana indicates that this remains the case in rural areas, where "people depend heavily on their not so well endowed natural environment" (GOB 1997: 11). Recognising that poverty has to be eradicated in order to conserve natural resources, the Botswana Government has developed a CBNRM policy to create incentives for the sustainable use and conservation of natural resources, and to encourage rural communities to enter into joint ventures with the private sector in order to receive the intended economic benefits (1997: 7).

In Zimbabwe, up to date research has identified desertification and land degradation as being caused in no small measure by poverty and an absence of alternative

mechanisms for sustaining a livelihoods, which means that people continue to exploit the limited existing natural resources for their survival, and the attendant water scarcity and periodic drought affect a significant portion of the country (GOZ 1998: 11). Deforestation is one of the major environmental problems facing Zimbabwe, and its root cause is linked to growing poverty in the rural areas (*ibid.*: 14). The main reasons for the deforestation include increasing demand for land for agricultural development and a heavy dependence on wood for fuel in the rural areas (*ibid.*: 14). Deforestation has caused land degradation and siltation of rivers and dams (*ibid.*: 14). A large amount of biodiversity has also been lost and with it the important socio-cultural role of forests (*ibid.*: 14).

Substantial areas in the Southern Africa region are dedicated to wildlife conservation (Moyo, O'Keefe, and Sill 1993: 3). For example, about 40% of the land area of Botswana is dedicated to wildlife (Moyo, O'Keefe, and Sill 1993: 60; GOB 1997: 7). Botswana's protected areas cover 18% of the land, and wildlife management areas another 22%, which constitute the buffer zones between parks and areas of intensive agriculture (GOB 1997: 7). Zimbabwe's forest resources extend over 24.9 million hectares, covering 60% of the country (GOZ 1998: 14), whereas 13% of the land, under the Parks and Wildlife Act, constitute parks and wildlife state land, botanical reserves and gardens (GOZ 1998: 7).

After World War Two, "Africa had a special place in the rise of international concern about conservation, not least because of its exceptional endowment of large and charismatic species, the high densities of wildlife populations and the relatively slow rates of wildlife extermination it had experienced in comparison to other regions" (Adams and Hulme 1999: 17). In the 1970's and 1980's, because of the various countries development needs, on the one hand, and people's struggle for survival in the other hand, widespread poaching of high value species began along with encroachments into national parks and

reserves, impoverishment of the forests as well as a loss of habitats (Rihoy 1995: 13; see also Milner-Gulland and Leader-Williams 1992; 196-197 Jones 1999: 296-297; Ledger 1999: 1). Based on World Wildlife Fund estimates, Brian Jones reported that between 1970 and 1982, the elephant numbers dropped from 1,200 to 250 and other large mammal populations by up to 90% in Kunene Region in Namibia, as a result of heavy poaching aggravated by the severe drought during the 1970's (1999: 296-297; see also Milner-Gulland and Leader-Williams 1992: 196-197). Further aggravating these phenomena, was the inability of the state to tackle these problems given a lack of resources. Governments did not pay adequate attention to conservation because of their other social, economic and political priorities (Rihoy 1995: 13).

Increasingly throughout the 1980's and 1990's, in order to deal with these problems in practical terms, two important new approaches were developed. Firstly governments adopted a community participation approach, and secondly the economic value of the wildlife that could be commercially established was seen to offer the potential for tangible benefits to be received by local people (Rihoy 1995: 14; see also Barbier 1992: 132). John Griffin described the new initiative thus: "To be effective as well as popular, governments had to provide positive incentives to ensure local people participated willingly in the conservation of biological resources as an integral aspect of their land use practices" (1999: 65-66). These approaches, often labelled 'community conservation', which have become predominant in conservation thinking globally, and today almost universal in sub-Saharan Africa, were approaches to wildlife management that sought "to include, rather than exclude, local people from protected areas such as national parks, and share control over the use of natural resources" (Infield and Adams 1999: 305; Adams and Hulme 1999). The rationale was that by turning local communities who were the neighbours of national parks into business partners, "it is unlikely that the joint investment would be jeopardised by

poaching, veld fires or other damaging actions" (Ledger 1999: 3). If for those people who share the same territory as the elephant, the elephant can be used to provide an income to meet the local people's needs and wants, then the elephant will be protected and managed, and the elephant habitat maintained (Hulme and Murphree 1999: 280).

The policy proposed in Namibia following independence in 1990, was that: "if residents of communal areas formed a common property resource management institution called a 'conservancy' they would be granted conditional ownership of certain game species, the right to use other species through a permit system, and the right to buy and sell game" (Jones 1999: 297). The Namibian Ministry of Environment and Tourism characterised the conservancy as being within a defined boundary with a defined membership having a representative committee with a legal constitution and being recognised by the government (*ibid.*: 297).

All of the 'community' initiatives that address conservation and poverty alleviation in Southern Africa have been undertaken using different names, but most often have been designated as community based natural resource management (CBNRM), community-based conservation, and community conservation (see for example Matemba 1995: 120; Taylor 1995: 152; Adams and Hulme 1999; Hulme and Murphree 1999: 277; Hulme and Murphree 1999a; Murombedzi 1999: 292). Community conservation is defined here as "those principles and practices that argue that conservation goals should be pursued by strategies that emphasise the role of local residents in decision-making about natural resources" (Adams and Hulme 1999: 19). According to William Adams and David Hulme, the definition of community conservation incorporates projects and programmes which have been labelled as CBNRM, community-based conservation, community wildlife management, collaborative management, neighbours as partners and integrated conservation and development programmes (1999: 19). The first argument of this chapter

is that they should more appropriately be called sustainable wildlife use initiatives. Although theoretically CBNRM is not exclusive to wildlife (Jones 1999: 296), in practice most CBNRM projects are concerned with the sustainable management of wildlife involving local people and the accruement of benefits derived from it.

Commercialising wildlife, particularly the larger mammals and birds, has been regarded increasingly as the most economic and best ecological use of land in much of the region, which is characterised as arid and semi-arid, and where there is a very limited land area for sustained crop cultivation and livestock production (see Griffin 1999: 12). This is the result of both the ecology of the southern Africa ecosystems and the well-developed and vibrant wildlife tourism industry in the region. The wildlife industry can still accommodate wildlife conservation initiatives and produce considerable revenues, which could potentially be harnessed to encourage local communities to participate in wildlife habitat conservation and anti-poaching campaigns. The wildlife industry is defined here as the economic sector based on the consumption or non-consumption of wild species of fauna on communal, private, public or state land, in distinction to the traditional subsistence sector (see Ledger 1999: 1). In the wildlife industry, economic activities are primarily related to tourism, either national or international, and incorporate game lodges, game farms - notably those for ostrich and crocodile - hunting, photographic safaris, bird watching, as well as animal sales and products from culling operations, game breeding, live capture, trophies, meat and hide production on a commercial basis.

The wildlife industry or any other form of ecotourism to survive or be developed necessarily depends upon the conservation of that environment. That particular habitat is indispensable to run the private or state business. An effective production system needs to respect "the obligation to preserve the ecological base for development", this was a critical requirement for sustainable development as outlined by the Brundtland Report (WCED

1987: 65). Thus, outreach strategies have been developed involving extension, people's participation, revenue sharing, community development and conflict resolution. Conflicts do exist, everywhere and over time. In relation to conservation however, the conflicts have caused adverse effects on local livelihoods and frequently these have involved violence against people and their property, or have forced people to resettle in new areas ususally involving a deterioration of their living standards (Hulme and Murphree 1999: 279). In essence, the people are deprived of resources.

As early as the 1960's, biologists began suggesting wildlife management as the most productive and profitable form of land use in certain types of more marginal land for conventional farming (Westoby 1967: 22). In 1967, Westoby, citing the example of Kenya, recognised that tourism, hunting and the sale of animal products was an important source of foreign currency for many African countries, and referring to a plantation project in Malawi, demonstrated how the income from game cropping operations largely financed the forest activities: "By providing meat, skins and trophies such as ivory, wild animals make a positive contribution to the income of forest land" (1967: 22). A more recent example is the community of Sankuyu, in Botswana, which receives 50% of the meat that the safari operator produces, and a fee in addition for the duration of the contract amounting to US$87,000 (Chigoya 1999: 3). Note that, after diamond mining, the Government of Botswana recognises wildlife tourism as the second most important engine of economic growth for the country (1997: 8; see also Barnes, Burgess and Pearce 1992: 141).

In 1989, after a substantial reduction of African elephant populations through ivory poaching, the Convention on International Trade in Endangered Species (CITES) placed the African elephant in the list of endangered species. This meant that the international trade in ivory was prohibited. Some governments of Southern Africa settled down to new conservation approaches and anti-poaching measures, to ensure the legal return of high

profits from the ivory trade from CITES (Munjoma 1997: 2-3). A long-standing conflict persists to the present day, however, between CITES and some Southern African countries concerning the ivory trade, as it has in the past over crocodile farming (Moyo, O'Keefe, and Sill 1993: 332). For example the Government of the Republic of Botswana stated the dilemma thus:

"Our adhesion to some conventions, particularly CITES, however, prohibits Botswana from utilising some of the conserved resources, particularly the elephant herds which are now too large for the wildlife habitats and are already doing irreparable damage to the ecosystem. Botswana's own herd is estimated at 80,000 and our efforts, together with a group of five countries in Southern Africa, to have some utilisation schemes developed have been strongly resisted by the international community. The worrisome thing about this particular issue is that objective scientific facts are being ignored. It is in this context that Southern African countries seek to ensure that limited and regulated trade in ivory is permitted by CITES once again. Such trade could significantly enhance the value of elephants to those who live with them on a daily basis, thus providing an incentive for the protection and conservation of this vital resource" (GOB 1997: 8-9).

Elephants are not only the most remarkable land animal living nowadays, but are also the grand attraction encouraging tourists to visit Southern Africa, and they provide a paramount source of income in almost all wildlife programmes (Moyo, O'Keefe, and Sill 1993: 327). Apart from holidays of a lifetime driving a Land Rover through the bush, or in silence listening to and watching the birds under an Acacia tree, or other such dreams to be fulfilled in an adventure on the African savanna for many animal lovers, there is another side of the coin. The elephant is a huge mammal and can play havoc on its surroundings (Munjoma 1997: 3), provoking serious damage affecting the natural regeneration of the woodlands (Burger 1992: 18) or destroying the livelihood of the local people by crop-

raiding, and it can even threaten human life itself (Hulme and Murphree 1999: 277). These two sides of the coin are strongly favourable and complementary arguments to support the development of the wildlife industry and conservation of the environment (trees, grass, water, and wildlife) in the region with the active participation of local people.

Most of the conservation initiatives have been implemented and subsequently monitored by the Governments' Wildlife Programmes and National Park Departments. Wildlife can make a significant contribution to national economies, in particular through foreign exchange earnings gained from wildlife viewing, safari hunting and game cropping (Moyo, O'Keefe, and Sill 1993:3-4). Given the typical characteristics of transboundary savanna landscapes in the region and the existing strong tourism market, conservation of wildlife as a valuable asset may provide an output of high value, increase the rate of employment, and the high profits gained could in theory, be shared among all the stakeholders, thereby alleviating poverty. However, "all of Southern Africa's CBNRM programmes are seeking to enter the same international market for wildlife and eco-tourism" (in Rihoy 1995: 7)

The Botswana Natural Resource Management Programme (NRMP), the Namibia Community Based Natural Resource Programme and Living in a Finite Environment Programme (LIFE), the Zambia Administrative Management Design Programme (ADMADE), and the Zimbabwe Communal Areas Management Programme for Indigenous Resources (CAMPFIRE) are primarily based on utilisation and management of the wildlife resources (Matemba 1995: 120; Rihoy 1995: 13; GOZ 1998: 2; Matowanyika 1998: 3; Jones 1999: 295). This involves either or both consumptive and non-consumptive uses of wildlife resources (Matemba 1995: 120). All address the development of the wildlife industry through a community participation approach.

The Botswana Government's efforts are directed towards maintaining biodiversity in the protected areas by conserving natural habitats and wildlife with minimal intervention and under an appropriate management. The Botswana NRMP relies exclusively on the Department of Wildlife and National Parks with the support of the USAID funded Natural Resources Management Project. Wildlife is the principal form of land use in Wildlife Management Areas, and only activities compatible with wildlife management are allowed within these areas (GOB 1997: 7). Outside of these areas, wildlife is still widespread, but its abundance and species richness is limited by the increase of human development activities (*ibid.*: 7). The goal outside is to assure the sustainable utilisation of wildlife to boost the national economy for the benefit of citizens (*ibid.*: 7). Communities can apply for a wildlife quota and they are able to use this quota directly or commercially.

CAMPFIRE, implemented since 1989 (Thomas 1992: 75), is a long running programme which attempts to embrace rural people living in communal areas of Zimbabwe into the development, management and sustainable use of their natural resources by devolution of the stewardship, in terms of custody and responsibility, to resident communities (*ibid.*: 72). In relation to the challenge of accommodating the needs of rural households with those of ecosystems, it enables communities and families to benefit economically from wildlife in their areas (GOZ 1998: 8). Interestingly, the original conception was more concerned with the wider concerns of the conservation and management of wildlife, grazing, forestry and water (Thomas 1992: 72). However, as CAMPFIRE evolved, it has principally used and focussed upon wildlife, for both consumptive and non-consumptive end use (Makuku 1992: 96; Matemba 1995: 120; Taylor 1995: 152).

In Zimbabwe, the emphasis placed upon the management of wildlife has two principal motivations. The first is its potential for conflicting with sustaining human

livelihoods, and the second is its potential for generating substantial financial returns (Thomas 1992: 73). Rather exceptionally, CAMPFIRE is also being practised for inshore fisheries in Lake Kariba, and in the management of indigenous forests in Mutoko District (GOZ 1998: 8). The growing commercial wildlife utilisation in Zimbabwe is a result of its significant game population, the rapid development of expertise in this area, the existing marketing facilities, and the source of capital established in the well-developed tourism industry and commercial farming sector (Moyo, O'Keefe, and Sill 1993: 328). We would add as a critical factor, that independent Zimbabwe had inherited a very effective top-down wildlife conservation structure in terms of preserving the wildlife resource.

Owing to its focus on wildlife and to being attached to the Department of National Parks and Wildlife Management, communities living in areas with no game do not benefit from the CAMPFIRE projects (Makuku 1992: 96). In game areas where CAMPFIRE is in place, wildlife objectives have aimed to replace the existing desire of local communities for the expansion of agriculture and livestock (Murombedzi 1999: 292). In 1992, Makuku said already that CAMPFIRE "is encouraging rural communities to stay together with wildlife with a view to generating income" (1992: 96).

In the 1990's, because of the strong wildlife industry in some countries and the character of wildlife mobility that requires more land to re-establish their traditional migratory routes, this view of 'stay together with wildlife as a good neighbour' has travelled across the national frontiers and became a cross-border conservation issue, with Transfrontier Parks and Transfrontier Conservation Areas. The idea was to link up game parks that are in different countries through inter-state agreements to develop common conservation programs and ecotourism. Seven potential transfrontier parks have been identified in southern African involving Botswana, Lesotho, Mozambique, Namibia, South Africa, Swaziland and Zimbabwe (see Inter Press Service 27 May 1998). In 1996, the chief

executive of the South Africa National Parks Board, Robbie Robinson, said that: "It is difficult, there is so much potential but there must be a desire from others for the transfrontier park to materialise... For it to become reality the Kruger National Park and its management policy must be the core of the transfrontier park" (in WildNet Africa News 3 September 1996). We now turn to examine these transfrontier conservation initiatives.

2.2. Another victory for 'elephant' conservation

The long-standing polemical debate on conservation and trade of the African elephant still continues, with new proposals and arguments constantly appearing. In 1997, CITES allowed Botswana, Namibia and Zimbabwe to sell the elephant ivory on an "experimental quota", limiting it to a one-off sale to Japan in accordance with CITES regulations, and restricting trade only to registered raw tusks of a certifiable national origin and natural mortality (Burney *et al.* 2000: 3). Because CITES regulate the international trade in endangered species, this has been one of the most influential international conventions on the national policy and practice of conservation and the sustainable use of natural resources, particularly of wild fauna and flora.

One of the outcomes of the 'elephant struggle' in the CITES arena, is the consensus between the fourteen countries of SADC on the need for co-management of cross-border wildlife populations in making resource management decisions, and with revenues to be committed to natural resources conservation and community development (Africa Resources Trust 1997: 1-2). The Transfrontier Parks and Transfrontier Conservation Areas (TFCA) are the archetypical regional initiative, with joint decisions being made for the co-management of the wildlife population in a concerted trans-border wildlife effort. Botswana, Malawi, Mozambique and South Africa in particular have developed policies

that encourage transboundary natural resource management (Griffin 1999: 13). In 1999, the governments of Mozambique, South Africa and Zimbabwe decided to create a large conservation area by joining wildlife management of the Mozambique game area (*Coutada 16*) in Gaza Province, Kruger National Park in South Africa, and Gonarezhou in Zimbabwe (BBC News 24 October 1999, see also Inter Press Service 27 May 1998). Under the same Mozambique TFCA project are the Maputo Elephant Reserve to be link into Maputaland reserves, namely the Tembe Elephant Reserve in northern KwaZulu-Natal, and the Chimanimani ecosystem to be co-managed with Zimbabwe.

The ecological rational beyond the idea of TFCA is that a common transboundary natural resource management plan of the same ecosystems, river basins and wildlife migratory routes formerly divided and disrupted by artificial limits imposed by political frontiers, can bring greater ecological stability for the region (Griffin 1999: 11). Moreover, the initiative to achieve this greater ecological stability can be encouraged by other considerations, such as a desire to improve political and economic cooperation and stability, and build greater cultural and social harmony within the region (*ibid.*: 11). SADC encourages regional development recognising that peoples, natural resources and ecosystems transcend national borders (*ibid.*: 12). It is the same artificial lines which divide the natural ecosystems which also divided the peoples of the region.

The Kgalagadi Transfrontier Park was the first Transfrontier Park in Southern Africa. It was created in April 2000, joining the Gemsbok National Park of Botswana and the Kalahari Gemsbok National Park of South Africa. The Gaza-Kruger-Gonarezhou (GKG) Transfrontier Park was created by the Governments of Mozambique, South Africa and Zimbabwe soon thereafter, in October 2000. The latter is the most ambitious in terms of the overall territorial extent, covering a combined area of approximately 40,000km2 of the three countries (DEA&T 2000). According to the agreement signed by the three

governments, the GKG Transfrontier Park includes the Coutada 16 in Mozambique, the Kruger National Park and its adjacent Makuleke Region in South Africa, and Gonarezhou National Park including a slice of land southwards to the Limpopo River in Zimbabwe, including the Malipati Safari Area, Manjinji Pan Sanctuary, and the community areas linking Gonarezhou to the Kruger National Park further south. (2000: article 1). The area adjacent to the GKG Transfrontier Park will be also managed as the GKG Transfrontier Conservation Area. In Mozambique these adjacent areas will include the Banhine and Zinave National Parks, the Massingir and Corumana areas, and the inter-linking regions. In South Africa and Zimbabwe these will include the various private and provincial reserves bordering the GKG Transfrontier Park.

The definition of a transfrontier park may vary, but in essence it is that: "the authorities responsible for areas in which the primary focus is wildlife conservation, and which border each other across international boundaries, formally agree to manage those areas as one integrated unit according to a streamlined management plan" (DEA&T 2000). These authorities also collectively assume the task of eliminating all human barriers inside of the Transfrontier Park, in order that the animals can wander freely in the area (DEA&T 2000). The concept of a transfrontier conservation area is different from the above. It accepts various management plans for each component area, whilst maintaining as the common objective the long-term sustainable use of the natural resources, but there is not a free movement of animals across the whole conservation area (DEA&T 2000). It applies to "a cross-border region where the different component areas have different forms of conservation status, such as Private Game Reserves, communal natural resource management areas, and even hunting concession areas" (DEA&T 2000). They border each other but they are physically separated by fences, roads, railway lines or other barriers (DEA&T 2000). In both concepts is implicit the main objective of wildlife conservation

and more generally the long-term sustainable use of the natural resources across international boundaries. An additional common aspect is that tourists will be able to drive across international boundaries into adjoining conservation areas (DEA&T 2000). The difference rests on two aspects. The first is the allowance or not of animal movement in the whole area and, second, the acceptance or not of different conservation regimes in the component areas.

The GKG Transfrontier Park will bring together some of the wildlife areas and will be managed as an integrated unit across three international boundaries. Each country will run its own affairs and build its own tourist facilities in their area whilst observing the same management plan. Hence: "In the case of the GKG Transfrontier Park, the conservation authorities in Mozambique, South Africa and Zimbabwe will collaboratively manage wildlife and natural resources in the different areas to promote biodiversity conservation, and in a manner which will benefit local communities and regional tourism" (DEA&T 2000). According to the Agreement signed by the three governments, two of the six objectives stated for the creation of this Transfrontier Park are:

- "to enhance ecosystem integrity and natural ecological processes by harmonising environmental management procedures across international boundaries and striving to remove artificial barriers impeding the natural movement of animals;
- to develop frameworks and strategies whereby local communities can participate in, and tangibly benefit from, the management and sustainable use of natural resources that occur within the Transfrontier Park" (2000: article 3).

The aim is one of improving the lives of the rural communities involved which will in turn contribute towards biodiversity conservation by demonstrating the economic and social advantages that wildlife conservation can bring (DEA&T 2000). However there are

some potential problems to be faced by the transfrontier initiatives. "Political boundaries very rarely respect ecological systems, and this Transfrontier Park will strive to re-establish historical animal migration routes and other ecosystem functions disrupted by fences and incompatible legislation. This more natural ecosystem will then also be jointly managed according to harmonized wildlife management policies, promoting the return of a larger and more resilient ecosystem with greater chances of long-term sustainability" (DEA&T 2000). The GKG Transfrontier Park expects extensive private sector involvement, whilst managing to optimise the benefits of both biodiversity conservation and the economic development of local communities (DEA&T 2000). The first question is how will this be attained in practice, in particular providing jobs and revenue generating opportunities? The comprehensive study by David Hulme and Marshall Murphree (1999a) explicitly concluded that direct community participation in wildlife management had not delivered to date the expected economic returns directly to communities. One of the reasons was that there were already too many mouths feeding at the pot higher up the order. How much more will this be the case with a transfrontier initiative where national sentiments add an additional layer of complications?

Economically, the transboundary natural resource management can increase efficiency in managing and monitoring natural resources, in reducing or eliminating duplication, in creating an economy of scale and or enhancing economic opportunities (Griffin 1999: 11). Engaging so many different stakeholders with vastly different concerns and expectations, means that poverty reduction of the rural poor, biodiversity conservation and economic exploitation by private enterprises do not necessarily go together. It is even more likely that achieving one of these goals will lead to failure in reaching another one, particularly if the private sector is encouraged to develop sophisticated tourism infrastructure (see DEA&T 2000). Mozambique, for instance, learns technically from other

southern Africa countries, particularly from South Africa, which has the know-how to produce more animals in a limited land area, and make from these greater revenues. Mozambique has the land but does not have enough animals, the know-how and other critical economic factors in sufficient quantities to compete with neighbouring countries. Indeed, one commentator, Robbie Robinson, at one point suggested that Mozambique was developing in such a manner that could 'foreclose options' for land west of the Kruger National Park being used in the transfrontier park (see WildNet Africa News 3 September 1996).

Furthermore, institutionally, socially and economically there is a tremendous rift between the local people and other stakeholders. For instance, local communities which have been socially and economically excluded in the past, are unable to compete today with the private sector and to ensure the same opportunities and privileges that the private sector may obtain from the common resources. This means in effect that the private sector has far more potential and opportunity to benefit from TFCA than local communities. John Griffin draws attention to the weak devolution of tenure and user rights to local communities and to the possibility that community benefits may be usurped by larger entities such as NGO(s) and national interests (1999: 14).

Community conservation approaches are presented as being non-contested and a-political, however, development is difficult and highly political in practice, doubly or triply so when crossing national boundaries. There are two aspects that need particular attention in this initiative. The first is to examine who gains and who loses with this intervention (see Chambers 1983: 185). The second is how the Transfrontier Parks and Conservation Areas can contribute to poverty alleviation or contribute to the sustainable development of the participating countries, defining sustainable development as being about ameliorating the overall quality of life and satisfying peoples needs (see Munslow *et al.* 1995: 4).

Some serious questions need to be addressed from the practice to date. Is conservation of wildlife primarily seen to be a valuable resource for the development of the tourism industry or is it for the benefit of local people's development? How many rural Africans can enjoy the tourism facilities provided, and fulfil their dreams say, of driving a Land Rover through a wildlife area?

Wildlife management, since the 1960's, has been recognised as often being the most profitable and appropriated land use in much of the southern Africa region. Because of the well-developed wildlife tourism industry which accommodated wildlife conservation initiatives and produced considerable revenues, substantial areas in the region have been dedicated to wildlife conservation. In the 1980's, there was widespread poaching of wildlife, encroachments into national parks and reserves, impoverishment of the forests and a loss of habitats which was aggravated by the incapacity of the state to tackle the problems given a scarcity of resources.

To deal with the ecological problems, a different strategic approach was evolved by governments: community participation in local conservation programmes was seen as offering more tangible benefits to local people to meet their needs. After the end of apartheid in South Africa in 1994, the managers of most state protected areas were looking to initiate urgent programmes which could delivery tangible benefits to neighbouring communities (Ledger 1999, 3). The basic principle was that by involving local people who share the same territory as the elephant, the elephant could be utilised to provide an income to meet people's needs. In this way, the elephant would be protected and the elephant habitat maintained. Thus, the narrative of sustainable wildlife use initiatives could be basically as follows: given the strong wildlife tourism industry in the region, wildlife provides services and goods of high value for the tourism market. Therefore wildlife can increase the rate of local employment and the amount of profits gained can be shared

among all of the stakeholders alleviating local poverty. However, as argued by Brian Jones, success depends upon the "intrinsic value communities place upon wildlife as much as instrumental incentives" (1999: 295).

We can concluded that the majority of community conservation projects in the region have been principally created, formulated, prepared, orientated and focused upon wildlife and related ecosystems in order to protect the existing wildlife industry. Few initiatives address other forms of natural resource utilisation, as we will see in the next sections. The use of other natural resources in a more integrated way may offer greater possibilities for the people of Southern African who are primarily rural dwellers and their livelihoods are basically derived from the environment. Their circumstance need to be rigorously investigated. Hence: "Empirical evidence from a variety of different locations suggests that rural households do indeed engage in multiple activities and rely on diversified income portfolios" (Ellis 1999: 1) and this diversity of livelihoods is often overlooked by the 'architects' of policy (*ibid.*: 4). Studies conducted in the Derre Forest Reserve in Zambézia Province, Mozambique, indicates that the forest provides only one part of a much broader local production system which contributes to satisfying people's basic needs (Paupitz 2001: 2; see also Ribeiro *et al.* 1999: 28-29).

2.3. Community-based wildlife conservation practice

Community conservation projects represent a new philosophy and policy in economic development models and natural resource protection (Rihoy 1995: 13). In the words of Brian Jones, the CBNRM programmes can "represent a potentially powerful development paradigm, addressing issues of governance and rural development as well as conservation" (1999: 296). Botswana, Namibia, Zambia, and Zimbabwe have produced a

policy context for the role of local communities in wildlife management, mechanisms for retaining a share of the benefits and revenues, and local institution arrangements for decision making (Rihoy 1995: 35).

In 1991, during a National Conference on Environment and Development, held in Maputo, Marshall Murphree presented five principles, later known as Murphree's five principles for CBNRM, as follows:

1. "Effective management of the resource is best achieved by giving it focussed value for those who live with it"; whether the economic benefits exceed the costs of managing a resource;
2. "Differential inputs must result in differential benefits"; who pays the costs of managing the resources should receive higher benefits than those who do not sustain those costs;
3. "There must be a positive correlation between quality of management and the magnitude of benefit"; a greater investment in the resource has to result in greater benefits;
4. "The unit of proprietorship should be the unit of production, management and benefit"; the community group who manage the resource should have the property rights of the resource; and
5. "The unit of proprietorship should be as small as practicable, within ecological and socio-political constraints" to achieve better management of the resource (1991: 6-7).

In 1995, analysis undertaken by Elizabeth Rihoy indicates that in relation to Murphree's five principles for CBNRM, these are being applied in Botswana, albeit in only a small number of pilot projects. In Namibia, the principles are endorsed as explicit policy objectives (1995: 16-17). In Zambia there has been an ongoing debate concerning what

decentralisation and local control mean. In Zimbabwe there is a debate on the 'Appropriate Authority' status and empowerment of the local producer community, although some of the Rural District Councils have delegated this authority to wards and villages (*ibid.*: 16-17). Elizabeth Rihoy presented the following hypothesis: "For a community to manage its resource base sustainably it must receive direct benefits arising from its use. These benefits must exceed the perceived costs of managing the resources and must be secure over time" (1995: 15). Although the four country programmes endorse this hypothesis, they have proceeded along different paths (Rihoy 1995: 15; Chigoya 1999: 1). In Botswana the emphasis was upon the development of a decentralised policy, conferring the management of natural resources to local people and the private sector (GOB 1997: 7), constituting local control mechanisms. Namibia focuses primarily on cultural and social issues, Zambia on ecological concerns, and Zimbabwe on the economic benefits (Rihoy 1995: 15).

The initial emphasis of CAMPFIRE was upon the empowerment of local institutions with respect to retaining the financial benefits obtained from sustainable wildlife utilisation and giving them the authority to manage that specific resource (Taylor 1995: 152; GOZ 1998: 8). The CAMPFIRE 'success' stories ultimately depend upon the potentiality and capability of rural communities to manage local resources, particularly in places where the resource base is abundant, and where there is a low-density human population and the communities are somewhat homogeneous (Thomas 1992: 75). In 1999, a critical analyses undertaken by James Murombedzi showed that wildlife conservation in Zimbabwe "remains dependent on a top-down and coercive approach" (Hulme and Murphree 1999: 281). Evidence to date suggests that at best there has only been a partial decentralisation programme of Zimbabwe wildlife conservation (Murombedzi 1999: 292). Yet the Zimbabwe Government has stated that "user rights to forest and land resources

belonging to the Government have been decentralised to Rural District Councils" (1998: 7).

In April 1995, during a natural resource management conference in Kasane, Botswana, Russell Taylor reported: "For many CAMPFIRE districts, local communities still remain mere recipients of an annual handout from wildlife utilisation. Even where such dividend payments may be followed by a careful and structured decision-making process on the part of local institutions as to how to spend the wildlife dividend, little time is devoted to wildlife management *per se*. Without such stewardship, CBNRM programmes run the risk of over-exploiting resources rather than ensuring their wise and sustainable use" (1995: 152).

In 1999, a study undertaken by James Murombedzi testifies that "CAMPFIRE has not devolved rights in wildlife to local communities to the extent where these communities can use these rights to gain an increased stake in the wildlife utilization enterprise at its multiple levels of value" (1999: 289). He argued that, although the local communities get a share of revenues, they have little control over wildlife management, there is no equity in wildlife utilisation, and there are few opportunities to provide goods and services to the wildlife industry. "Moreover, all forms of wildlife utilization have the effect of further removing decision-making authority from the people" (*ibid.*: 289). Dadirayi Chigoya offered corroborative evidence for this when he interviewed Ivine Bond who works for CAMPFIRE. She said: "These people are not managing their wildlife yet. These people are managing benefits which are passed on to them by the district council. So until people are actively participating in wildlife management, it will still be something out of their control" (in Chigoya 1999: 3-4; see also Metcalfe 1994: 185-186).

As argued in the previous sections, CBNRM in southern Africa has been constrained to wildlife, and the most recent evidence (Hulme and Murphree 1999a) has

demonstrated that it does not deliver improved economic benefits to local communities. Other natural resources utilised in a more integrated way may offer better possibilities and new opportunities for local communities. There is no doubt that the wildlife industry can deliver considerable sums of capital, but in many areas for different social, economic or ecological reasons this can not be true or even applicable. In areas such as the south of Maputo, on both sides of the border, which have historically been poor and isolated, the ecotourism or the cultural tourism may play a better lead role in economic development. However, the communities from Matutuíne and Maputaland make three important observations:

- "Expectations on the size and speed of ecotourism development should be realistic, and the extent of the benefits should not be overestimated in order to avoid future disappointment.
- Tourism markets are typically unstable over time, hence the diversification of income sources at the local level is important for livelihood security.
- There is a tendency for government to tax community-based tourism programs more heavily than both purely private sector initiatives and other economic sectors at community level (e.g. agriculture). This should be avoided as it acts as a strong disincentive to development of the sector, and also reduces community benefit" (Anon 1998: 4).

The first two observations indicate that the scale of the operations, level of funds to be invested, timetable, equity of the benefits and diversification have to be realistic and in accordance with the stage of community development. The final observation refers particularly to the case of South Africa, but it is an important aspect to take into account for Mozambican community based initiatives, in order to tax revenue defined by the

government to work as an incentive for economic development. Tourism is an unstable market over time; therefore there is a need to expand income sources to secure continuous livelihoods as a priority for local communities (Anon 1998: 4). CBNRM approaches as used in the region for game areas, need to be more holistic and realistic when applied in other areas embracing grazing and forest areas, and forest, flora and fauna products used for food, medicine, fuel, construction and craft (Whiteside 1998: 5).

2.4. Production of wildlife on forest land

Forests, which are also a wildlife habitat, have a value much greater than timber or wildlife production alone. Forests produce a wide range of measurable and non-measurable goods and services, which are essential for human life. A particular feature of the forest is that the tree is both the means of production (a wood factory) and the final product (timber), and it occurs over large areas making human observation and control difficult (Westoby 1967: 5). The increased demand for forest products is also associated with the history of human development as wood products are used in many ways in our lives and in all sectors of the economy (*ibid.*: 15), from food and firewood to instruments and tools, furniture, building and decorative materials, and arts and crafts.

Forests are resilient ecosystems, but there are limits to their ability to withstand environmental change, and understanding these limits can facilitate enhancing various forest outputs (Maini 1992: 5). Effective approaches for sustainable resource development, require the harmonisation of human activities with the biological and physical aspects of forest ecosystems (*ibid.*: 4). Monitoring human activities and forest ecosystems' evolution and their interaction is crucial when practising sustainable resource development, as it involves a number of ecological, socio-economic, technological and political factors.

Hence: "Forestry is not about trees, it is about people. And it is about trees only in so far as trees can serve the needs of people" (Westoby 1967: 4).

To illustrate this point, in the miombo woodlands, a decrease in the number of trees, for example for commercial purposes, and the consequent opening of the forest canopy results in an increase of grass production which, in the absence of herbivores, provides more potential fuel for fire, and potentially therefore more intensive forest fires, with the subsequent greater suppression of tree re-growth, leading in turn to more grass (Frost 1996: 51) and yet more fire! Fires are the main hazard, but they are frequently intentionally started to clear bush, impel grass to shoot, or force game to run away from its cover and be caught (Harrison 1987: 177). It is easy and traditional to use fire to clear bush, particularly on new open *machambas* [peasant farms]. Peasants do it because they do not have another alternative for this task, except by using their own labour. However, fires "destroy seedlings and coppice shoots and slow down the rate of natural regeneration" (Harrison 1987: 177).

Miombo, a type of forest widespread in Southern Africa, is used to define woodland dominated by *Brachystegia* spp and other species of genera *Julbernardia*, *Isoberlinia* and *Berlinia*, and the dominance of these genera makes miombo floristically distinct from most other African woodlands (Frost 1996: 19). Thus, larger canopy openings should be avoided in order not to increase grass biomass and the related fire hazard (Geldenhuys 1996: 139; Sitoe 1996: 145). Miombo woodland normally responds to wood harvesting by coppice regeneration, see Figure 5, but the regeneration rate is seriously affected by human activity (Chidumayo, Gambiza, and Grundy 1996: 176). Although various authors defend miombo species which regenerate amply through coppice re-growth and root sucker, seeds of the miombo trees can germinate instantly after dispersal, if there

is a satisfactory water supply, for instance, after a heavy rain (Chidumayo and Frost 1996: 63).

Figure 5. Coppice regeneration in response to wood harvesting after management.

Catapu forest, Sofala Province, Mozambique. Photo supplied by TCT Indústrias Florestais, Lda

Although there is a self-renewal ability of the forest, natural regeneration requires much more. It has to rely on the human capacity to monitor and take preventive measures to recover and improve naturally and artificially the original state of the harvest area as quickly as possible. According to Maini, sustainable forest development means recognising

the limits of forests to withstand environmental change, individually and collectively, and in managing human activities to produce the maximum level of benefits obtainable within these limits (1992: 6).

The people who live in or around forest resources are equally well placed to act as a key partner in natural resource management. The long-term survival of the forest reserves in Chobe District, in Northern Botswana, it has been argued, depends entirely on direct benefits returning to the local community and constant growth in their pattern of living (Burger 1992: 21). In Chobe District, the forest is seen and appreciated for its timber production and wildlife utilisation, recreation and ecotourism for which the different stakeholders, including the private sector, local communities, academics, and non-governmental and governmental organisations are seeking collaboration (*ibid.*: 22-23). In Mapembe Mountain in Zimbabwe, which is a protected area under the Natural Resources Act, the forest is primarily appreciated for cultural purposes. The local communities requested the Natural Resources Board to protect the mountain environment as a conservation area, in turn protecting the cultural value of the mountain (GOZ 1998: 22). The Mapembe Mountain Conservation Project is a community based with ample participation in the protection of this ecosystem, both for ecological and cultural reasons (*ibid.*: 22).

We can conclude that community conservation projects in the Southern Africa region represent a new direction in economic development models and natural resource protection. However, throughout this chapter, the author has argued that the majority of these projects in the region have been principally created, focused and constrained to wildlife and the related ecosystem in order to protect and expand the existing wildlife industry. CBNRM has been an approach for the sustainable use of wildlife. Few initiatives have addressed other forms of natural resource utilisation. The use of other natural

resources such as forest resources, in a more integrated way may offer other possibilities for the rural people of Southern African whose livelihoods are basically derived from the environment.

Evidence to date suggests that at best there has only been a partial decentralisation programme of wildlife conservation. Community conservation has not yet devolved rights in wildlife to local communities to the extent where these communities can use these rights to gain an increased stake in the natural resource utilisation. The weak devolution of tenure and user rights to local communities creates the possibility of community benefits being usurped by outsiders empowering the wildlife elites. Although the local communities get a share of revenues, the practice has demonstrated that it does not deliver improved economic benefits to local communities. They have little control over wildlife management, there is no equity in wildlife utilisation, and there are few opportunities to provide goods and services to the wildlife industry. The people are not managing their wildlife yet. The people are managing benefits, which are passed on to them by the governments, tourism industry and conservation agencies.

Mozambique has followed this trend. We turn now to analyse the experience of the CBNRM projects in Mozambique, and examine how they have contributed to the development of local community's livelihoods, by helping to sustain the natural resource base.

Chapter Three

Community-based initiatives in Mozambique

"Projects have to do a lot of work on attitudes and behaviour of their staff. Mozambican history and culture and the recent era of emergency relief aid do not guarantee the openness, stepping down and listening to the rural poor that is necessary for working with these approaches" (Pijnenburg 1999: 5).

This chapter will analyse the experience of CBNRM projects in Mozambique, and demonstrate how they may contribute to sustainable economic growth in local communities. This chapter will also explore the role of local institutions in creating appropriate and sustainable self-development within the social and economic context of Mozambique. If community participation and sustainable development approaches are to be effective it is essential that the local community be clearly identified and understood. We begin by discussing this aspect of the research.

3.1. Identifying the local community

Local community is a difficult concept to define in the Mozambique context. It must embrace all of the different kinds of communities that exist in Mozambique following the destructive impact of Portuguese colonisation, and the recently ended 28 years of successive wars, which created a massive number of *refugiados* [refugees] and *deslocados* [internally displaced people]. Wars as well as natural disasters disrupted and dispersed existing communities causing new ones to be formed. Society is in a constant state of flux. Gerês village, in Gaza Province, is mainly composed of displaced people, yet with the formation of a neighbourhood organisation, this now constitutes the community. The people living here were forced to abandon their traditional land and seek protection in villages along the Limpopo corridor during the war (CEF 1997a). Tanga community in Maputo Province comprises former refugees who have returned from South Africa to their place of origin following the peace agreement in 1992.

In neighbouring Malawi, ULG Consultants in their study defined community as a village or group of villages under the jurisdiction of a village headman or a group village

headman (1997: 3). In general, the rural communities have been "claimed to be clearly bounded, socially homogeneous, and based on shared norms" (Virtanen 2000: 116). As ULG Consultants observed, the rural areas remain relatively traditional and traditional authorities are still very influential (1997: 3). In many parts of Mozambique this is also the case although it varies from one place to other. In the case of Manica province, the traditional leaders still have a strong influence in rural areas (see Sousa, Juma and Serra 1995: 7; Virtanen 2000: 116; Serra 2001: 4).

In Sussundenga, Manica Province, the traditional hierarchy of leadership, see Table 1, consists of three levels, as follows: the *Rei* [King] or paramount *Mambo* [chief of the chiefs], *Nhakwawa* in the local language, today commonly known as a *Régulo*; the *Mambo* [chief], *Tsapanda* in the local language, also known popularly as a *Régulo*; and the *Sabhuku* [headman] or *Saguta, or Mfumo* in other areas of Manica province (Hughes 1995: 5; Sousa, Juma and Serra 1995: 5; Cuahela 1996: 16; Ribeiro 1999 *Research notes*; and Serra 2000, *Research notes*). This social structure is not strictly hierarchical and combines religious and secular or worldly powers in a flexible, adaptable system (Hughes 1995: 5). According to Hughes, *Mambos* and paramount *Mambos*, in the secular sense, are on an equal footing, both are the final authorities in land allocation and in dispute resolution within discrete, bounded territories. However, in religious matters, the *Mambos* defer to a paramount *Mambo* who conducts the ceremonies asking the ancestral spirits for rain and agricultural fertility (*ibid.*: 5).

During the colonial period, the Portuguese tried to change this structure. It is important to note that *Régulo* is the Portuguese term for the local chief, and the *Régulo* constituted the lowest rung of the colonial administration. Today, the paramount *Mambo* or *Nhakwawa*, and the *Mambo* or *Tsapanda* are acknowledged as a *Régulo*, and have been ever since the period of consolidation of colonialism in Mozambique. Under the system of

Portuguese colonial administration, see Table 1, the *Nhakwawa* had normally the rank of *Regedor* who was the real *Régulo* (Alves 1995: 72). Under the *Regedor* or *Régulo* there were *Chefes de grupo de povoações* [Chiefs of a group of villages] who normally were the *Tsapanda* (*ibid.*: 72). The *Saguta* by local tradition, were representatives of the *Tsapanda* and were also categorised as *Chefe de povoação* [Chief of the village] under the Portuguese colonial system (*ibid.*: 72). A body of auxiliaries was accepted by the Portuguese as being *Cabos de Terra*, a kind of local police, normally employed by the Portuguese Administrator to help the *Régulo* (Ribeiro 1999, *Research notes*; and Serra 2000, *Research notes*).

Table 1. Traditional and colonial hierarchy in Manica Province

	Hierarchy		**Commonly known in**	
	Traditional	**Colonial**	**Portuguese**	**Local language**
1	*Nhakwawa* [Chief of the chiefs]	*Regedor*	*Régulo*	*Mambo*
2	*Tsapanda* [Chief]	*Chefe de grupo de povoações* [Chiefs of a group of villages]	*Régulo*	*Mambo*
3	*Sabhuku* or *Mfumo* [Headman]	*Chefe de povoação* [Chief of the village]	*Saguta*	*Saguta*

Sources: Alves 1995; Hughes 1995; Sousa, Juma and Serra 1995; Cuahela 1996; Ribeiro 1999 *Research notes*; and Serra 2000, *Research notes*.

The *Régulo* was normally appointed from the pre-existing traditional leadership or from the same family lineage as the traditional leadership, as long as he did not offer any resistance to the colonial power (Harrison 1996: 217). For instance, the paramount chief Dodoeroi in Manica Province was removed in 1920 by the Portuguese administration because he had joined chief Macombe, leader of one of the most famous rebellions against Portuguese occupation in the Barué revolt, which occurred between 1917 and 1920 (in Serra 2001: 6-7). Thus, the position of *Régulo* gained significant power and legitimacy, based as it was upon existing traditional power sources recognised by members of the

community and reinforced by the administrative authority bestowed by the Portuguese colonial regime. An important function of the *Régulo* was tax collection for the colonial state. In chapter 5, we will examine in detail the traditional hierarchy of local leadership and its community role for the two case study areas.

In Sussundenga, there are three *Reis* [Kings] namely Dombe, Mahate and Mucimua, but Chief Mahate has been recognised to be the paramount *rei* due to his religious power and most of the sacred forests and pools are located in his territories (Sousa, Juma and Serra 1995: 5). During the war, both parties to the conflict, Frelimo and Renamo courted Chief Mahate, and he still continues to have political influence in Sussundenga District (Hughes 1995: 5; see also Sousa, Juma and Serra 1995: 4). For example, Camila Sousa, Juma Juma and António Serra have described how on September 23rd, 1995, Chief Mahate was unable to meet the research team as previously arranged in Ndimbantore, around 29 kms from Sussundenga town, because of political commitments. In the same locality, two party delegations were present, Frelimo and Renamo, preparing to visit Chief Mahate at his home on the same day (1995: 3-4). Even in the following days the research team could not arrange a meeting. During the preparation phase of the Chimanimani TFCA project, Chief Mahate was consulted about the project on several occasions. Chief Mahate explained on September 23rd, 1995 to a Frelimo delegation, that he would consider participation in the project only if no exotic fauna species were introduced, there was no hunting, no animals were sold, and there was no use of diesel (*ibid.*: 6).

Portuguese colonisation understood the role of the traditional authorities and introduced dramatic changes in the traditional structures of community leadership in Mozambique. They created the *Régulo* as a Portuguese appointed chief, to be a pliant colonial representative and to manage the local forced labour, and the *capataz*, colonial

police under the *Régulo* or colonial companies, to force people to work (Munslow 1983: 36; see also Isaacman 1996). The *Régulos* were often selected from amongst the traditional leaders or someone was chosen, approved, and sometimes imposed by the colonial authorities on to the local communities in order to ensure Portuguese rule at the local level (Harrison 1996: 204-5).

Even though the *Régulos* were politically and to some extent socially excluded following independence in 1975, in many rural areas they still enjoy some popularity and authority, particularly in areas of Renamo support. An analysis of the social data collected and research undertaken for the preparation phase of the TFCA project in Chimanimani indicates that the traditional leadership retains strong support in the District of Sussundenga, and is likely to be the most effective structure for local decision-making with regard to the management and use of natural resources (Hughes 1995: 4). As acknowledged by Martin Whiteside: "There is growing recognition of the importance of working with the traditional leadership, particularly in the management of natural resources" (1998: 5).

In 1998, Hélder Muteia, Vice Minister of Agriculture and Fisheries, reflected upon how the existing social structures had changed over time, primarily under external pressure, and consequently was forced to adjust to the newly-fashioned economic and political realities, moving from the pre-colonial, to the colonial and then to the various post-independence periods, and any community based initiative would have to take into account these historical changes as a starting point (1998: 2). From the time of the ancestors, local communities in Mozambique, and more generally in Africa, have developed and implemented different natural resource management regimes based on their accumulation of traditional knowledge, adapted both to the geographic, but also to the prevailing social, cultural, economic, and political context (*ibid.*: 2).

In 2000, the Mozambique Council of Ministers finally recognised the important role of community authorities by approving decree 15/2000, of 20 June (GOM 2000). This decree characterised community authorities as "traditional chiefs and other leaders recognised as such by their respective local communities". Under the terms of this decree, local government should be prepared to collaborate with community authorities and to "ask their opinions on how best to mobilise and organise the participation of local communities in the realisation of plans and programmes for economic, social and cultural development". José Chichava, Minister of State Administration, also declared that community authorities would be involved in tax collection and that any income they received would be based on the amount of tax they collected (Notícias 10 July 2000).

According to Joseph Hanlon, editor of the Mozambique Peace Process Bulletin (MPPB), the designation of 'other leaders' in the definition of community authorities is clearly intended to include those leaders introduced by Frelimo after the independence of Mozambique, and who have gained local credibility, as well as religious leaders, senior teachers and nurses, and even traditional healers (in MPPB August 2000).

In 1994, primary research undertaken for this doctoral research in two different rural areas of Manica Province revealed the extremely different forms of community to be found at the local level (Ribeiro 1995 *Research notes*). The first location identified in the research was a remote and mountainous area, in Rotanda, in the District of Sussundenga. This area was chosen because the community located for the research was small and stable, with local institutions working effectively, with substantial well managed natural resources, and with its agricultural surplus being commercialised in Zimbabwe's markets, across the nearby frontier.

The second community identified was at Zembe, near the provincial capital Chimoio, in the District of Gondola. This represented a relatively large community

constituted by displaced people, coming from many different locations in the north and south of the country, sharing primarily in this 'community', in the recent past, only the benefits of protection from the war. This community had very limited natural resources, demonstrating clear signs of deforestation and low levels of production. Members of this 'community' spent their time waiting for government aid and a few people worked in the nearby provincial capital.

Thus a local community is broadly defined here as being people who live within a given geographical territory, sharing a certain degree of common identification and interests, and with well-defined boundaries. Such community definition may be compared with the concept of the village in the communal lands in the English speaking neighbouring countries, and has been discussed and used in the vast literature on defining communities, for instance, in the analyses undertaken by William Ascher (1995: 83-84). This community concept is also implicit in the work of Robert Chambers when he refers to 'outsiders' (1983: 2-74) and to the clusters of disadvantage of the rural poor (1983: 108-138), and it is also addressed by Ian Scoones and John Thompson (1994).

Community is not a monolithic, undifferentiated entity. It contains different categories of people distinguished by age, sex, interest, and power (Murphree 1994: 404). Communities contain within them internal conflicts and schisms and different sets of interests, which may often breach along economic, gender, and social lines (Western and Wright 1994: 8). Community can be more precisely understood as a relatively self-contained socio-economic and residential unit, comprising social groups, households, and individuals (Uphoff 1986: 11).

Community, defined by geographical context, will have to include immigrants, cultures in transition and those with no ancestral ties to the land or to each other (Western and Wright 1994: 8). Thus, this definition is very open and comprises those communities

formed not only by closely related families who share a common lineage but also by immigrants who have been settled or resettled after the Peace Agreement, which ended Mozambique's civil conflict.

There are many communities sharing a common resource base. For instance, the communities living around the Licuáti forest in Maputo Province, or in Chimanimani in Manica Province, depend on the same natural forests (Ribeiro 1999 and 1999a *Research notes*). No community today exists in isolation. Every community nowadays depends on markets and consequently is subject to pricing policies and marketing structures outside its own control (Western and Wright 1994: 10). Community based initiatives operating within this broader framework carry many risks and uncertainties. David Western and Michael Wright argue that if there is a lack of a sense of responsibility towards society, and if there is inappropriate management capacity, devolving power to local communities in the form of greater managerial command over the use of resources, carries the risk of even worse natural resource destruction (1994: 10).

Responsibilities and capabilities should be directly linked with the right to use and manage resources. This linkage of rights, responsibilities and capabilities was inherent within traditional communities and was imposed by both natural and social resource constraints. The integrity and interrelatedness of these factors broke down once local communities joined the larger constellation of communities within nation states, and more recently a global community of nations (Western and Wright 1994: 10). Identifying local communities is one part of the problem, actually enabling community participation is entirely another, particularly in a country where trust and confidence within the community and between community and outside organisations have been severely affected by war (Pijnenburg and Nhantumbo 1998: 8).

3.2. Enabling community participation

In 1997, the government of Mozambique endorsed community participation in natural resource management in an interesting and challenging manner, but also in ambiguous terms that could mislead or undermine the government's efforts. Firstly, the new Land Law *recognised the customary rights* of the local communities and the role of traditional leaders in conflict resolution. Secondly, the Municipality Law *opened the possibility for local communities to control*, use and manage the natural resources to their benefit. Thirdly, a Policy and Strategy for Forestry and Wildlife Development *considered community involvement in the conservation and management* of those resources (Muteia 1998: 3-4; see also Law no. 19/97: article 24). Author's italics are to show that on the one hand, these mark important steps forward towards a genuine sustainable development policy, on the other hand, this still leaves the final decision making to the existing staff in the governmental agencies concerning when, how, in what circumstances and in what form community participation will be implemented. This can delay the process of registration of land or of local community institutions being recognised by law, and indeed, impede a favourable agreement and outcome of such initiatives. However, overwhelmingly community participation projects have been externally initiated by different agencies, and the local participation component was only developed after the project had been approved.

Edmund Barrow and Marshall Murphree argue that only in conservation projects and programmes that require collective activity does the concept of 'community' participation arise (1999: 46). They develop a participation typology namely: functional or organising; interactive; and self-mobilisation or empowerment. In each of these categories the local community plays different roles in the project or programme and there are certain tasks allocated to local people (*ibid.*: 46). In the functional or organising participation

category, normally after major project decision were made, people were organised or grouped to attain predetermined objectives (*ibid.*: 45). Although initially dependent on outsiders, some projects may become self-dependent, enabling local people to take decisions independent of external institutions (*ibid.*: 45). The interactive category is participation characterised by joint analysis and actions, making use of local institutions, people are confident and keen for change (*ibid.*: 45), they are active stakeholders. Self-mobilisation or empowerment is the type of participation that may challenge the existing arrangements and structures. Local people gain their rights to make their own decisions, independent of external agents or institutions, and this involves the creation of autonomous institutions driven by the local community (*ibid.*: 45).

The opposite end of the participation spectrum is what Edmund Barrow and Marshall Murphree would classify as the minimalist approach, or participation which is essentially 'passive', 'information giving' and fundamentally involves 'consultation' (1999: 45). With passive participation, the local people are informed of what is going to happen or has already happened and it remains a top-down approach, with the crucial information belonging to external agents (*ibid.*: 45). Information giving means that people participate by answering questions formulated by 'extractive' professionals, consequently people are not able to influence either the analysis or its use (*ibid.*: 45). In consultation, people are consulted generally on externally defined problems and solutions, and external agents listen to their views (*ibid.*: 45). In all three cases, local people are not involved in decision making, hence it cannot seriously be categorised as a 'community' based approach, project or programme, "since they do not involve local corporate action" (*ibid.*: 46).

Research by the Biodiversity Support Program also makes clear that involving the local community is complex and time consuming, and normally donor organisations and

project managers are constrained within a timetable to spend the money allocated, and do not have the necessary time required to initiate community dialogue and encourage real community participation at every stage of the project (1993: 107; see also Mitchell 1997: 162-163).

The review on community conservation initiatives in the region undertaken by Edmund Barrow and Marshall Murphree revealed that: "Community conservation initiatives are locked into time frames too short for the organisational evolution required. When positive results are not immediately apparent the temptation is to throw more funding into the project, under the fallacy that money can substitute for time. As the inevitable increase in dependency diminishes the incentives for community self-direction and self-sufficiency, the structural utopianism implicit in blueprint approaches is disillusioned and the conclusion is reached that the project has failed. It probably has, but for implementational rather than intrinsic reasons" (1999: 62).

Two main issues were identified by the communities of Matutuíne, in Maputo Province, and Maputaland, in South Africa, during their first community workshop, and interestingly the rural communities of Mágoè District, in Tete Province, also prioritised these same issues. First, clear and specific land and resources rights were requested over their territories, which should be legally registered as soon as possible (see Anon 1998: 4; Foloma 1998: 5). Second, legal mechanisms were required to officially recognise communities as a distinct entity, in order for communities to be able to enter into contractual and other agreements (Anon 1998: 4; Foloma 1998: 5). Communities have to be able to make arrangements for themselves as communities, rather than depending on outsiders to sign on their behalf. Not infrequently, outsiders take the decisions and receive the benefits in their own name (Anon 1998: 4; Foloma 1998: 5).

Certain principles such as legal rights appear to be indispensable if initiatives which encourage people's own development are to progress. Yet certain problematic challenges also exist, namely how to fit such local development initiatives into a country's macro economic context and policy objectives. Establishing the vinculum between local development through people's participation, and the country's overall development means meeting the challenges of reconciling differential scales of operation and priorities, e.g. sustaining livelihoods versus increasing export earnings (CEF 1994: 7). According to Martin Whiteside, "decentralisation of local government provides opportunities to develop new alliances and to provide more locally appropriate and accountable services" (1998: 5). This may run counter to broader macroeconomic structural adjustment imperatives.

Progress for people living in rural areas must be grounded in opportunities to manage the natural resources in a way that benefits themselves (Chigoya 1999: 2). Progress is used here to mean a self-reliant and gradual move towards a better social and economic level of living, to differentiate it from the traditional development concept that is normally employed in the literature on economic growth (Rostow 1965). The latter development model has been held up as the universal path to eradicating poverty and is frequently imposed onto poor local communities in various ways. Such an orthodox form of development, defined narrowly as economic growth, "might in effect not be the priority for a majority of Africans", is the observation made by Patrick Chabal and Jean-Pascal Daloz in their study of The (In)significance of Development in Africa (1999: 125). Africa may be moving in a different direction: "globalization in the opposite direction" or "modernity without development" in "continuity with its own civilisation" (*ibid.*: 125). There are "strong indications that the graft of this model on to Africa appears to be rejected, as though in its present form" it remains "too 'foreign' a body" (*ibid.*: 137).

Yet Barry Munslow argues that for most people in Mozambique, development in the form of sustaining and improving their livelihoods, remains their absolute priority (1999: 2). Alcinda Abreu has made the case that: "Sustainable community development allows people in the community to develop their own knowledge about themselves, their environment, their needs and resources, which gives them a better chance to take more effective action, turning themselves into active agents of development" (1999: 141). The challenge remains how poor local people can achieve this development objective and we turn next to examine community-based initiatives applied to alleviate poverty in the rural areas of Mozambique.

3.3. Framing participation in conservation projects

Following the government's initiatives, by 1997 there were approximately thirty community based resource management projects in operation throughout the country (Adam, Mate and Simão 1998: 1), most in very preliminary stages of development. They were also very different in their scale of operations both in terms of territorial extent and levels of funds invested (*ibid.*: 1). Generally there has been a tendency to view environmental problems solely in ecological, physical and technical terms, and the social and economic aspects of environment problems have been largely neglected.

In most of the existing CBNRM projects in Mozambique, on the contrary, the economic development of the local community has been a universal and explicit objective, and long term goal of all of these projects, yet rarely has the same level of importance been given to maintaining biodiversity targets (Aycrig 1998: 1). Biodiversity conservation is rarely a priority of local communities (*ibid.*: 1). Nevertheless, local people habitually tend to conserve their surroundings. "But Africans had their own ways of conservation,

although they were not documented and the term 'conservation' did not even exist. They did it in order to survive" (Chigoya 1999: 3). By way of illustration, the African wild lands are seen as fertile sources of basic products highly valued by the community, and it is only under abnormal pressure that activities are undertaken that may lead to their destruction (Roger 1998: 3). The rationale is that the local community "has obviously an interest in the maintenance of its resource base and thus they would be the most indicated actor to control these resources. This is the basis of the CBNRM approach and the logic seems to be irrefutable" (Pijnenburg 1999: 3).

Local people are unlikely to have the same values as the executing agency, or the same objectives as the CBNRM project. Marshall Murphree suggests that people are keen to manage the environment if such management improves the conditions of their livelihoods, and when the degradation is such as to threaten the life sustaining process or offend local people's own aesthetic values (1991: 1). For them, conservation is an abstract and alien word; however they see and take care of natural resources as an investment for present and future value, the objective being the enhancement and the maintenance of their livelihoods (Barrow and Murphree 1999: 51). In fact, even lacking state assistance or backing from abroad, many African communities have continually practised community conservation (Hulme and Murphree: 1999a: 8).

Although general initiatives were taken to consult with the local communities, to ascertain their needs and priorities, there is little or no evidence that the CBNRM projects in Mozambique have been formulated, and their activities designed in active cooperation with the local communities (Aycrig 1998: 3-4). Instead, these projects have been composed at central level with inputs from foreign consultants (*ibid.*: 4). Bart Pijnenburg and Isilda Nhantumbo have argued that: "The conception of the project is generally the responsibility of the representatives' of the project. One of the reasons for this is perhaps the fact that this

is a relatively more technical task and that the elaboration of the project document has to be in agreement with the pattern established by the donors" (1998: 14). Moreover, particularly in the case of natural resource management projects aiming at biodiversity conservation, social matters are neglected in favour of the biological and natural science aspects of resource management (*ibid.*: 11), failing to accommodate the views and needs of local communities. In terms of the relationship between the project staff and local people, Bart Pijnenburg has argued that it has not always been good and the "lack of confidence is linked with the fact that the intervening agency enters the area with a conservationist approach and not in the first instance in support of the local population" (1999: 5). "If from the start the animals (that are in many ways also an enemy for the local people) are regarded" as being "more important than the people there will be distrust from the start onwards, that will be difficult to mend later on" (*ibid.*: 5).

In November 1998, the government of Mozambique organised the first conference on community based natural resources management and opened the national discussion on this as a potentially viable approach towards the sustainable use of resources. In his address to the conference, Joe Matowanyika, the representative of IUCN, the World Conservation Union, acting on behalf of Yolanda Kakabadse, President of IUCN, made some challenging remarks on the southern Africa experience of CBNRM. This revealed both successes and failures, with a whole diversity of initiatives being implemented in widely different settings (1998: 2). Joe Matowanyika's remarks issued a challenge for the development of Mozambique's own vision of the CBNRM philosophy and its initiatives on the ground, which were as follows:

- The experience in southern Africa shows that CBNRM approaches have been externally activated and have underestimated the constraints of the existing political and legal conditions.

- CBNRM initiatives have been developed within a narrow vision based on the management of one resource, chiefly wildlife, instead of a broader range of the local resources.
- External actors such as donors, academics and NGO(s) are demanding a new policy, which embraces empowerment and decentralisation on behalf of the local communities, far removed from conditions on the ground and ignoring new forms of institutions more flexible and responsive to local conditions and demands.
- The entry point for almost all CBNRM initiatives has systematically been ecological, with community involvement conceived as an obligatory prerequisite to accomplish the conservation objective, disregarding the social and cultural realities, and the basic issues of food security, poverty, and sustaining the livelihoods of local communities (1998: 3).

During the same conference, Yussuf Adam, José Mate and Ofélia Simão highlighted the fact that existing CBNRM projects have not only been externally initiated, but the financing and executing agencies, both governmental and non-governmental organisations, have tried to convey the impression that the idea and origin of the CBNRM projects under their auspices have been developed from the bottom upwards (1998: 1-2). "Although in nature participatory and, according to the rhetorics of the project documents contributing to empowerment and improved livelihoods, the interventions seem to be rather externally imposed in the communities" (Pijnenburg 1999: 4). In their study of 22 CBNRM projects in Mozambique, Bart Pijnenburg and Isilda Nhantumbo found four staff motivations for the utilisation of participatory approaches by different outsider organisations:

- To obtain better knowledge of the reality through direct contact with the local people;

- To plan activities based on the priorities identified by or with the local communities. To avoid plans made *for* the population in a paternalist way. To ensure that the plans are meaningful for the local community. Compared with top-down approaches, participation may improve the efficiency and sustainability of the intervention;
- To create a sense of ownership or, better still, local commitment to the decisions made and, where relevant, to the social infrastructures, such as schools, erected. When local people decide on the priorities, when they feel it belongs to them, they will take responsibility. They will engage when it comes to implementation of the intervention and, in the case of construction of infrastructure, remain committed to maintain it.
- To help local people resolve their own problems. Thus, local people develop skills and take their destiny in their own hands (1998: 7).

However, Bart Pijnenburg has argued that: "Most of the participatory development interventions are mainly in the interest of outside institutions. The agency and or the donor have an agenda and participation is a tool to implement the project activities" (1999: 5). A more recent example of this is provided by the sustainable management project of Derre Forest Reserve in Zambézia province, where the community participation was required as a result of the government's inability to the control natural resources (Paupitz 2001: 3). Empowerment is seldom the final objective. "Communities contribute their time and effort to self-help projects with some outside assistance" as described by Robert Chambers (1994: 2). Yet too often it is local communities who participate in other's projects (*ibid.*: 2). For example, there is a group of NGO(s), particularly the ones that are involved in building social infrastructures in Mozambique, which identify their local needs according to the government's plan (Pijnenburg and Nhantumbo 1998: 8). This intervention at the community level, can be considered as a consultation exercise or confirmation of the plans,

and it can serve to mobilise the community to become involved in project implementation (*ibid.*: 8).

Eduardo Mansur's methodology proposal for community involvement promotes the idea that it is the project staff who have to take the initiative to identify the project, leaving local community participation '*passiva*' [passive]. It should be encouraged to participate, but only in order to generate the necessary information for the project (1998: 1). HaBarad, Dikope and Gaboiphiwe view this issue in the following, rather different, way, the "CBNRM model becomes most realisable when we do not propose it - when instead, we focus on creating conditions enabling rural people to see that cooperation and conservation are the best available options for improving their daily lives " (1995: 130). Melkamu, Croll and Matowanyika have argued that "the failure to include communities from the beginning contributes to the failure of sustainable environmental development" (1995: 17). Bart Pijnenburg and Isilda Nhantumbo suggest that: "Participation allows better planning of the activities since it can be done on the basis of the priorities identified by or with the communities" (1998: 7). It avoids a situation in which "the plans are made *for* the population in a paternalist way. It guarantees that the plans are important for the community. Compared to top down interventions, participatory approaches will improve the efficiency and sustainability of the intervention" (*ibid.*: 7). Back in 1992, based on community experiences in India, Rangadhar Sahu observed quite starkly that: "They must realise their problems. They must be made responsible for their own development. Let them manage their own resources" (1992: 89).

That '*passiva*' participation assumption, if accepted, may lead inevitably to a continuity of both the colonial and post-colonial centralised top-down approaches and the extractive development model leading to an idiosyncratic peasant resistance to so-called development. This strategy, in sum, is not so dissimilar to the colonial progenitor which

was concerned to raise revenue and extract surplus from peasant production, giving little or no significance to peasants as agents of their own destiny or development, in favour of capitalist market expansion into local peasant societies (see Harrison 2000: 3-7). Repeatedly the state imposes rural development programmes and the peasants resist these and render them useless. This has led to certain authors emphasising that the presence of the state in rural communities is "very much a contested presence in which peasants might avoid state power, subvert it, or only enter into contact with the state in certain situations" (Harrison 2000: 5).

Joaquim Chissano, President of Mozambique, in an open session of a national meeting of district administrators, said that the process of civil society consultation and debate had been lost, and a professional deontology was not prevailing within the government administration (AIM 10 August 2000). President Chissano recognised in this speech that the absence of what should be the right way of conducting good governance, in order to benefit from people's contributions and ameliorate a top-down government approach, was a major cause of inefficiency and ineffectiveness of government (AIM 10 August 2000). Government was unable to respond to people's needs (AIM 10 August 2000).

Isilda Nhantumbo has prescribed a bottom-up planning process to enable partnerships with local communities. This she deems as being essential, as well as undertaking a detailed study of the social and economic conditions of the given area of any proposed community initiative (1998: 5). Recording community priorities and the objectives of on-going community activities, as well as the new objectives that people expect from any partnerships are fundamental in order to build up such partnerships and help to find the necessary compromises between the different actors and objectives (*ibid.*: 5).

There are many options for community based interventions, such as whether to work through existing institutions or create new committees and structures, whether to pay compensation or salaries to members of the community, how to identify what, if any, role there should be for traditional leaders and what relationships to establish with state agencies. The golden rule should be that the appropriate choices should be made with the participation of the community (Whiteside 1998: 5). Bie Nio Ong and Barry Munslow argued that the reason to place emphasis on participation is that "it is very difficult for one person to develop another unless he/she wants that development to occur and actively engages in the process. People and communities need to be proactive in their own self-development" (1999: 112).

In May 2001, after nearly a decade of thinking and implementing CBNRM in Mozambique, during the second conference on CBNRM, held in Maputo, the following question was addressed to the participants of the conference: How is it possible to avoid communities being excluded from the management of their natural resources? (Vaz *et al.*: 2001: 4). In this regard, Alda Salomão has described the role of local communities to date as being merely to ensure the conservation and policing of the natural resources in exchange for sharing some benefits, the terms and conditions of which are defined by the government (2001: 5). She has also questioned what kind of community participation the state is *de facto* willing to institutionalise (*ibid.*: 5). In the same conference, Pedro Celestino, coordenator of the Programme of Land and Resources for the Communities in Maputo province, has argued that there are on-going projects that simply considered the local communities as being yet another natural resource available to be managed and preserved for the tourism of foreign and national elites (2001: 4).

Although the existing Mozambican experience of CBNRM projects can be construed by many officials in government and non-government organisations as making

significant steps forward in ensuring the sustainable use of natural resources and in the conservation of those resources, local communities still remain alienated from active participation in modern society, their resources are exploited, and their rights and benefits remain restricted.

3.4. For whom are the rights and benefits addressed?

Another regional success story in CBNRM is the *Tchuma Tchato* project in Bawa, a remote wilderness area in the Mozambican Province of Tete, at the confluence of the Luanga and Zambezi rivers, where the easiest access is via Zimbabwe. Although far from the capital and from social and economic infrastructures, a writer based in South Africa, Eddie Koch, wrote: "Villagers in a remote corner of Mozambique battled poachers, safari companies, and their own lack of unity to create a resource-management project that is changing their lives" (1998:1). But it is not only the life of Bawa villagers that is being affected, they are also changing the country's perception concerning economic development models, with a recognition by politicians of the importance of local community traditions, particularly involving tenure over land and natural resources.

Tchuma Tchato, which locally means 'our wealth', with a strong flavour of the neighbouring Zimbabwe CAMPFIRE initiatives, also promotes the sustainable consumptive and non-consumptive use of wildlife by the residents. In Koch's words, this involves the "prudent use of the wildlife that surrounds them" (1998:1). This prudent use of the local resources was guided by the sensible approach given by the DNFFB's Wildlife Department staff applying people's participation even before the project started. The *Tchuma Tchato* project manager was assigned and transferred to Bawa one year before the project started (Koch 1998: 1). The principle was building a lasting social relationship with

the community, understanding the social, economic and ecological reality based on field observations, building contacts with local people to gain their cooperation and trust, and introducing wildlife as being of great benefit to them if used in an appropriate manner (*ibid.*: 2).

Symbolically, in 1997, the Prime Minister of Mozambique, Pascoal Mocumbi, made the journey from the distant capital city of Maputo to visit the *Tchuma Tchato* initiative and return over US$15,000 from the Mozambique Safaris Company to eight thousand people of Bawa (Koch 1998: 3). Far more important than the money itself and the actual amount gained, was the ability of the community, granted by law, to take the funds into common ownership and make their own decisions about sharing, spending or re-investing the revenues generated in this process (see GOM 1995; Foloma 1998: 1). This scheme is characterised by Eddie Koch as profit sharing with the safari company (1998: 4).

The GOM (1995) in a Ministerial Diploma signed by the Ministries of Agriculture and Fisheries, Planning and Finance, and Justice, determined that state revenues derived from the use of wildlife would be divided into three parts. The first portion goes to the central state treasury, the second to local government, and the third is for local community activities (Madope 1999: 221). Although this new development may lead to an improvement in local people's lives, one question still remains to be asked: is it what local people really want? Is this again the case that local people are simply managing the benefits passed onto them by the government and private enterprise? Using a more theoretical approach, Isilda Nhantumbo has suggested that a mathematical model could be used to calculate the right allocation of economic benefits assuming that:

- The state holding the ownership of the land and natural resources has to ensure the conservation and the sustainable use of those resources, promote an enabling policy for community involvement and contribute to the national Treasury,

- The community the principal user of the resources has to ensure their food security and has to have an active role on the land use planning, and conservation
- The private sector, a profit maker, has to maximise the profit from exploitation of the resources taking economic initiatives without jeopardising the community's interests (1998: 2-5).

These assumptions also reflect the vision of most people in charge of CBNRM projects in Mozambique. The private sector is called upon to execute the economic objectives of the government's Forestry and Wildlife Policy, but this must be without dismissing the needs and concerns of one of the principal actors in the country's economic development, the local community (Nhantumbo 1998: 2). The local community benefits from payments in the form of revenue sharing or other forms of compensation from the private company, but its role is mainly restricted to performing fire protection, conservation and ensuring the sustainable use of the natural resources (*ibid.*: 2). David Hulme and Marshall Murphree characterised this as "community not as proprietors of the nation's conservation estate but merely as its neighbours" (1999: 278). In other words, the local community remains as the state warden of the natural resources and the protector of private business.

Detailed primary research conducted on the ground tends to support this critique. For instance, the DNFFB's pilot project of community based management of biomass fuel in the Licuáti forest in Matutuíne District, after ten months of project life, solely left behind in the terrain, 48 community *fiscais* [rangers] trained to enforce the forest law and to combat illegal timber cutting (Manjate *et al.* 1998: 3). A community programme for wildlife guards at Catuane, in the same District, under the *Fundação Natureza em Perigo* offers yet another such example. Since 1997, the *Fundação* trained and maintained a team

of six warders in Catuane area, in collaboration with the local police force and authorities, and with assistance from the Endangered Wildlife Trust and Conservation Authority of KwaZulu-Natal, South Africa, and DNFFB (Alves 1998: 1-3).

Tchuma Tchato represents an entirely different sort of initiative and it is this which makes it so interesting. It not only has the responsibility for controlling the natural resources, 'policing' their use, but it goes beyond this to include the overall management of the natural resources granted by law (Foloma 1998: 3). Thus the local community is able to negotiate with the private sector (*ibid.*: 5). Ken Wilson, Ford Foundation programme officer for Mozambique, has argued: "All too often rural communities acquire rights only over land and resources of limited or marginal value, ... If the *Tchuma Tchato* process can help communities earn a real stake in Mozambique's developing economy, it will present a truly exciting challenge to the rest of Africa and the world" (quoted in Koch 1998: 4). Because of this legal dispensation, GOM (1995), only applied in the locality of Chinthopo, the neighbouring communities of Daque and Ntuvi also in Mágoè District, although participating in natural resource management activities are not in fact empowered with the necessary legal instrument to manage and receive the benefits from the natural resources (Foloma 1998: 3; see also Hughes and McDermott 1997: 4).

In her report to the World Bank, Aycrig says that based on the present Mozambican experience, there is a general feeling that the authentic involvement of the local community requires a clearer definition of community property rights to the land and to natural resources more generally, and the equitable partition of benefits (1998: 9). For Martin Whiteside, the guarantee of tenure is indispensable if communities are to take a long-term view, and to conserve and invest in the land and its natural resources (1998: 5). Moreover, people will look to improve environmental management either to encourage increased production or to prevent the negative effects of a deteriorating environment on production,

only when the benefits of that management are perceived to exceed its costs, and if the people have the means to meet these costs (Murphree 1991: 2).

Two main issues have been identified by the communities of Matutuíne and Maputaland, and these are also prioritised by the rural communities of Mágoè District. First, clear land and resource rights over their territories are required which are legally registered as soon as possible (see Anon 1998: 4; Foloma 1998: 5). Second, legal mechanisms are required to officially recognise communities as a distinct entity in order for 'communities' to be able to enter into contractual and other agreements. They have to be able to make arrangements for themselves as communities, rather than depending on outsiders to sign on their behalf. Not infrequently, outsiders take the decisions and receive the benefits in their own name (Anon 1998: 4; Foloma 1998: 5; Ribeiro 1999a *Research notes*). People from Matutuíne and Maputaland, recognising the need to acquire new organisational capacities and abilities, see community capacity building as a means to realise their own vision, in authentic partnership with external actors, particularly in:

- "Establishing effective and democratic structures,
- Identifying and prioritising their needs and opportunities,
- Conceptualising and undertaking their own development initiatives and projects,
- Handling and resolving conflict within and between communities, and with state, private and non-governmental agencies" (Anon 1998: 2).

Throughout this chapter, the author has argued that although CBNRM projects may represent a new direction in the protection and economic development of natural resources by rural communities, the implementation of such projects continues to be an imposition from the outside of a pre-designed development model. CBNRM could be defined as a top-down approach used by the government, tourism and conservation agencies in order to

ensure the conservation of certain habitats in exchange for receiving pre-determined economic benefits. In such an endeavour, without taking into account the needs and wants of the local communities and their participation from the very beginning of the initiative, identifying local communities represents only one part of the problem. Perhaps, it is irrelevant for the local population who already know who is, or who is not, part of the community. Actually enabling local community participation in the development and conservation of environment is completely different from most existing initiatives. Perhaps, instead of community conservation and/or development, the 21st Century will become the epoch to develop approaches for 'community freedom' as it has been argued by Júlio Ribeiro, from 1960's onwards (1997: §106). Such approaches may help to solve the pervasive problem of poverty. Without the inner evolution of the local community as they desire themselves, and an appropriate institutional reorganisation at all levels of society, in the light of sustainable development principle and approaches, this task of enabling local people's participation may not be achieved in Mozambique. We turn next to examine the challenge of institutional reorganisation in Mozambique, and in particular the institutional changes which have occurred in CEF in order to conduct research with and for local communities.

Chapter Four

Redefining the role of a Forestry Research Institution

"Forestry is not about trees, it is about people.
And it is about trees only in so far as trees can serve the needs of people"
(Westoby 1967: 4).

This chapter will analyse the experience of institutional change in the Forestry Research Department (CEF), located within the National Directorate of Forestry and Wildlife (DNFFB) of the Ministry of Agriculture and Rural Development in Mozambique. More specifically it will examine the period between 1992 and 1996. This chapter is based upon Ribeiro (1999 *Research notes*), and the background theory based on Chambers (1983; 1987; and 1987a), WCED (1987), Munslow *et al.* (1988), and Murphree (1991). We begin with the redefinition of CEF's role which was undertaken with the growing influence of sustainable development principles and approaches: "From an initial focus on industrial forestry alone, the CEF began to reorientate its policy more towards meeting rural people's needs" (Ferraz and Munslow 1999: 7). The constraints and opportunities for implementing the new research programme (CEF 1997b), and the challenges and strategy adopted by CEF staff in order to achieve its objectives are analysed in the following sections. The re-establishment of the Field Research Station in Manica, and strengthening the staff training and dissemination programmes were seen as taking a positive step forward in responding to local realities, and this is analysed in the final two section of this chapter.

4.1. Redefining an institutional role: the case of the Forestry Research Department

CEF's role was to undertake applied research in forest and wildlife management issues from a social and institutional perspective, in collaboration with the technical units of DNFFB. CEF was charged with developing policy and identifying appropriate management and technical solutions for natural resource management activities. CEF was originally created in 1985, with a principal orientation towards industrial forestry for woodfuel and timber production through state plantations. This was within the broader

development goals of a state driven industrialisation strategy. It originally had three divisions: silviculture, wood technologies and forest economics. The objective of the program in forest economics was to define methodologies for improving the efficiency of state plantations and forest industries. Since its foundation CEF has collaborated closely with the Forestry Department at the Eduardo Mondlane University (UEM). Together they ran a joint laboratory for work on wood technologies and collaborated on topics ranging from tree cultivation to economic and project analysis.

In 1988 agroforestry was introduced into the silviculture division with the intention of complementing the DNFFB forest extension unit launched that year with the aim of working with the agricultural extension services in the provinces. With encouragement from the International Centre for Research in Agroforestry (ICRAF), trials of *Leucaena* and *Sesbania* were established in stations and on farmers' fields, alongside experiments with several indigenous leguminous trees such as *Cassia siamea*. Once an awareness of agroforestry spread, staff began to report that farmers had their own existing agroforestry systems. For example, in Manica Province it was found that farmers managed *Albizia* in their fields to increase crop yields. This led the CEF to reflect that it could perhaps also rely on farmers' existing discoveries to develop agroforestry in Mozambique, alongside international technologies.

A second experience at this time was important in enabling the CEF to re-conceive its role. In 1989, Province Forestry and Wildlife Service (SPFFB) in Manica identified a peasant who had seen montane terraced agriculture combined with forestry in Tanzania. Staff worked with him to develop a system of terraces with *Leucaena* on half of his land, leaving the other half under the existing system of cultivation. The enhanced production from the modified plot was so substantial, that in the second year four farmers adopted similar practices and in the third year over twenty farmers were involved. This took place

in the context of war, displacement and tremendous rural poverty and enabled producers to graduate from semi-subsistence to becoming wealthy smallholders. It taught CEF the lesson that developing new and more productive systems involved combining the state's operations with key members of communities who were themselves innovators.

On the basis of these kinds of experience the CEF began in 1991 to re-orientated itself towards meeting the needs of rural people. In 1992 a new institutional structure and research plan was established that gave key priority to carrying out research with rural communities, with the aim of making them the principal beneficiaries and enabling their knowledge and experience to become the basis of policy formulation and technology development. This national research plan was developed with other relevant institutions, including in the provinces, and involved the production of short- and long-term objectives. Welcomed by the government, this plan was part of a SADC initiative to strengthen forestry research capacity, which was unfortunately frustrated by the decline of FINIDA overseas development assistance financing.

In the absence of adequate donor resources, CEF in 1993 drew up its own strategy for institutional development with more realistic levels of internal and external investment. This was accepted by the DNFFB and CEF was later guaranteed its autonomous status and state budget support by the Ministry of Agriculture. In 1994, the CEF had secured donor funding from CIDA of US$580,000 over six years for the SADC Tree Seed Centre Network Project. This involved training (US$140,000), equipment (US$132,000), field and laboratory research work (US$72,000) and project operational costs such as seed collection of indigenous species (US$236,000), plus a 20% Government contribution. In the same year, the World Bank through IUCN also provided CEF with a US$10,000 grant for work on the promotion of the role of Indigenous Knowledge Systems and People in Southern Africa, within a SADC framework.

In order to implement these institutional and research plans, CEF initiated in 1992 three new divisions to address the needs of rural communities: Woodland and Forest Management, Community Forestry, and Ecology and Environmental Protection. In the following year the Community Forestry and the Economic Policy divisions were combined into a single development division because this was intended to orientate community work towards meeting peasant livelihood needs. CEF also started a Wildlife Management unit, in response to a request from the DNFFB Department of Wildlife, in order to identify how best to link wildlife management with community development and wider ecosystem management. Until a suitable candidate was identified and trained, the unit was staffed by the CEF ecologist who was also the head of the Ecology and Environmental Protection Division. It was supporting four UEM students in biological sciences who were doing research in the Maputo Elephant Reserve. CEF also intended to start an Animal and Plant Disease and Protections Division in the near future once a staff person was identified and trained. It was intended that this Division would be oriented towards meeting the needs of communities and the commercial sector with regard to the disease problems of key wildlife and forestry resources. It engaged in discussions with staff at the UEM and with the well regarded Pathology unit of the Forestry Commission of Zimbabwe, to assist in this effort.

Concurrent with the desire to effectively address the needs of the peasant sector, CEF also intended to develop a capacity to assist with the technical problems encountered by the emergent private sector. It was responding to the wider slow transition from a state centralised socialist model of development towards a more free market policy orientation. These private enterprises were becoming more important for rural development, employment and the national economy more generally. Furthermore, the new initiatives of the DNFFB were intended to build collaboration between the private sector and rural communities geared to managing the exploitation of natural resources more effectively. If

these commercial enterprises were not efficient, any collaboration would not be profitable for the local communities. Finally, CEF saw the private sector as potentially a useful client that would be able to pay for its services and thereby provide much needed additional resources.

In order to secure this institutional transformation into a socio-environmental applied research and policy unit that could really address the needs of rural people, CEF needed to begin by learning the existing techniques and management strategies of rural communities in relation to their wildlife and forest resources. Once something became known about these, it would then be possible to start to assess and to improve upon these techniques in partnership with local communities. CEF could use its scientific research capacity to complement what it believed to be the substantial existing knowledge and practices of local communities.

It was not the intention that the CEF should become a large institution at national level. It intended to remain with about fifteen professionals in Maputo, but with an increased facility at Marracuene national headquarters located in Maputo Province and at the research station in Manica Province, to perhaps a total of four field research stations. The intention was to up-grade the training and experience of its existing core professional staff and to mobilise and support field investigation by existing forestry and wildlife staff at provincial level, working alongside of members of rural communities and local authorities. In terms of building existing capacity, it was hoped to upgrade from the situation of two masters degrees, nine bachelors and a number of diploma-level personnel to a goal of two doctorates and six master degree holders. The Ford Foundation and IDRC assisted here, in relation to the social and institutional aspects of natural resource use by rural communities, with training bursaries.

4.2. Constraints in Addressing Natural Resource Management Issues

There were several serious problems facing the CEF in switching its focus of attention to rural communities and using participatory research to address their needs. Historically CEF's development policies had been decided at the central level and were imposed on the local people (CEF1994: 5-6). This had led to failures at both a local and a national level. In Mozambique there are hardly any channels through which the state can discover and respond to local realities and needs. At the same time, local communities are isolated from useful ideas and small financial inputs from outside of their own resources that could facilitate their development (CEF 1994: 6; and Ribeiro 1999 *Research notes*). Due to top-down government, local institutions have lost the power necessary for the management of natural resources and the right to benefit from their exploitation. The central problem remains the lack of communication between rural people and the government and between central, provincial and district government institutions, and this generates conflicts and contradictions and leads to missed opportunities (CEF 1994: 6; and Ribeiro 1999 *Research notes*).

There are currently hardly any Mozambicans with training in social and institutional aspects of natural resources management (CEF 1994: 6). In 1993, the few Mozambican professionals with technical training in these fields recognised from personal experience that unless they could reorientate their work towards rural communities they would not be successful (Ribeiro 1999 *Research notes*). They were frustrated by the lack of opportunity to obtain formal training and experience in their institutions in this area. CEF had been under-resourced (Ribeiro 1999 *Research notes*). The only guarantee from the state was the staff salaries, which were very low. The amount available for training, field work and other research was both small and too irregular for viable systematic and

participatory studies to be undertaken. For example, the budget requested by CEF to the Mozambique Government for 1993 was only $267,323 (CEF 1992). The Government approved just 32% of the required budget (Ribeiro 1999 *Research notes*). This reflected the general financial problems of the country and the fact that applied research in natural resources issues had not yet proved to the government, the commercial sector, or the general population that it could really help to solve their problems (Ribeiro 1999 *Research notes*). As soon as provincial and local government bodies began to acknowledge with enthusiasm the need for these kind of activities, CEF became frustrated by the lack of financial resources to respond to their requests (CEF 1994: 6; Ribeiro 1999 *Research notes*). Without an adequate input of resources it would not be possible to establish the credibility of CEF's work.

Working in a participatory way with rural communities would inevitably prove difficult, with the end of the war such a recent event and with the majority of Mozambican rural communities remaining extremely poor (CEF 1994: 6). There was also massive population displacement and a sense of disruption and dislocation, with people often feeling they were not part of a functioning community. Furthermore, the population in general did not have much faith in the capacity of outsiders to solve their problems other that simply by distributing relief (*ibid.*: 6). All these factors therefore made it difficult to facilitate effective community-based initiatives.

The rural population generally only benefited from the subsistence use of its natural resources and historically was excluded from benefiting from the marketing of these resources, which was normally carried out by safari operators, private hunters, commercial loggers, etc. who reaped these benefits (CEF 1994: 6). As a consequence rural people were unable to develop economically and environmental degradation occurred in some areas because the local people lacked an interest in, or the institutional mechanisms to protect,

their natural resource base. Meanwhile, in other areas, individuals exploited firewood or charcoal production in an unsustainable fashion because of a lack of management mechanisms to facilitate a more sustainable use (*ibid.*: 6). It will take prolonged effort to transform the current situation, since it requires changes in laws and in the attitudes and institutional behaviour of government officials, commercial companies and peasant communities.

4.3. Opportunities for CEF Initiatives

Despite the major problems faced in Mozambique, there were significant opportunities for CEF to take positive steps towards achieving its transition to an institution that works with rural communities to meet their development needs (Ribeiro 1999 *Research notes*). These opportunities include the following:

a) With the end of the war and changes in the way that government perceived the role of the state in development, it became possible to reformulate government extension programmes to address questions of poverty and the flow of information between government and rural communities. In 1994, the 'Pre-Programmes' of both the Ministry of Agriculture and the DNNFB emphasised community management and participation as the foundation for rural reconstruction (CEF 1994: 6-7). For example, the DNFFB Pre-Programme, Support to Management of Forestry and Wildlands Resources, Pre-Programme Support Document (UNDP MOZ/92/013/A/01/99), stated for example: "Community participation in sustainable forest management and an increased role of the family sector in agroforestry will be promoted". This programme mobilised $1,699,740 from UNDP and $1,039,260 from the Government, and FAO was the implementing agency. The objective of the Pre-Programmes was to lay a foundation, in this period of

transition from war to peace, for future rural development policies. Furthermore, there was a general desire to change the roles of extension agents away from being passive carriers of classical agricultural technology toward becoming agents for a two-way change and information-flow (*ibid.*: 7).

b) Major changes in local administration were being introduced by the decentralisation programme of the Ministry of State Administration, which should have provided opportunities for local participation in development. The transfer of rights to benefits from managing natural resources from the central government to local municipalities should have made these local government bodies allies in the search for sources of revenue for new approaches to sustainable management and exploitation of natural resources. CEF had already established good relations with the provincial authorities in Manica Province (CEF 1994: 7; Ribeiro 1999 *Research notes*).

c) Mozambicans recognised the failures of past rural development policies and many were now looking to research as a means of identifying new approaches to rural development that might work. It was generally accepted that participatory approaches were needed, but in Mozambique no experience of this existed in agricultural development and natural resource management. If CEF could manage to develop effective approaches in this area it could find many partners (Ribeiro 1999 *Research notes*).

d) An intensive interaction in subsequent years with CEF's sister institutions in Zimbabwe has indicated that there was much that could be learned from, and shared with, colleagues there. They were involved in Mozambique's own learning experience, and their experience could be adapted to the needs of Mozambique. The research and training capacity of the Centre for Applied Social Sciences (CASS) of the University of Zimbabwe, for example, was used to help build Mozambique's capacity (Ribeiro 1999 *Research notes*).

4.4. Challenges of Institutional Transformation

One of the most critical challenges facing CEF staff as they initiate this programme was learning how to start a process of consultation with people from rural communities and begin to discover what they knew (Ribeiro 1999 *Research notes*). This was both a personal and an institutional challenge. A related challenge was for CEF to learn how to bring staff and officials of the forestry and wildlife departments together to sit with and learn from local communities, so that a new dynamic could be initiated in the relationship between people and the state in the management of their natural resources. This was the key to the transformation that CEF was seeking to achieve.

The most difficult thing for CEF was taking the first steps towards adopting the new approach to research and learning (Ribeiro 1999 *Research notes*). CEF knew how to talk about its intentions and to plan but it did not have the experience of actually implementing policy. It was confident, however, that once the work had started the process itself would drive the institution forward. The challenge was to identify how the state and other external institutions could actually improve the livelihoods of rural people, and identify policies that would link local development through people's participation with national development. This required the involvement of local government structures.

Working with such a participatory social approach posed a major challenge to CEF's staff who were scientists by training. Rural people have extensive existing knowledge of their environment, their society and their problems, and the challenges that this presented to CEF were highly complex (Ribeiro 1999 *Research notes*). In order to assist local people, the CEF would need to acquire not only a solid scientific capacity but social scientific knowledge also. CEF had a small staff. It was faced with other demands on

its time in addition to this programme supported by the Ford Foundation and IDRC. CEF had to prioritise and structure its time and resources to enable the organisation to achieve its multiple objectives.

4.5. Short- and medium term goals

There were short-term and medium term goals established for this institutional development initiative for community based resource management research. The immediate aim was to create a new dynamic in the development of rural communities based on the sustainable use of natural resources with local community participation in their management. The specific objectives envisaged were as follows:

- To investigate the cultural, social and institutional aspects of the rural community;
- To investigate ways of involving the community in the development process;
- To study traditional ways and techniques for natural resource use and management;
- To analyse the benefits and revenues that could be achieved by natural resource use and management; and
- To investigate the legal aspects of the community's land and resource rights, such as land tenure, customary rights, etc.

Major goals set for CEF to achieve over five years included:

- CEF should have the institutional capacity to provide practical policy advice and technical back-up in each of the divisions in support of rural development and natural resource management;
- CEF should really know what it means to consult with people in rural communities and be able to work with them, to identify effective means to enhance their livelihoods;

- The demands of the people and institutions with whom CEF work should begin to drive the change in institutional development and thinking;
- National and provincial authorities, and increasingly ordinary Mozambicans, should start to see that the new way that CEF conducts research actually does contribute to tangible and sustainable development;
- CEF should have established a small dedicated team of well trained researchers with different specialities in the social and natural sciences;
- Staff of CEF should have developed the capacity to carry out high quality scientifically sound research that meets the needs of different sectors of Mozambican society; and
- CEF staff should also be able to channel the research capacity of field staff in the different divisions of the DNFFB and in other organisations, and be able to support their research activities with training, supervision and modest funding.

4.6. Activities and output

Proposed activities were as follows:

- Defining criteria for selecting the community, involving meetings and discussions with the local authorities;
- Selection and localisation of the community according to defined criteria. For this purpose visits to communities in the area allocated for the project would be made;
- Elaboration of a development plan or strategy for the community, based on discussions and surveys, on order to discover its wants and needs;
- Research and studies to support the above. For the effective development of these activities satisfactory research and studies needed to be undertaken.

With these initiatives the aim was to attain the following outputs:

- Sustainable development of the targeted community to facilitate its control of the development and management of its natural resources;
- A greater understanding of indigenous knowledge;
- Better understanding of the legal implications in order to formulate policy and legislative proposals related to land tenure and natural resources; and
- Training of technicians in related subjects such as social and natural resources, and ecology and management.

To achieve these goals, the strategy was to select two or three communities as pilot research communities in Manica Province (Ribeiro 1999 *Research notes*). The aim was to install a multi-disciplinary research team which would work together with the local people in order to act as a catalyst for the development of these rural communities, based on the sustainable use of the natural resources with the local community participating in the resource management (Ribeiro 1999 *Research notes*). This entire project could be characterised as a capacity building effort for CEF to perform its mandate. CEF staff identified the following four main categories of activities to achieve this:

- Formal training for CEF staff;
- Community-based research to be implemented by CEF;
- Institutional support for CEF; and
- Strengthening and supporting local field investigations throughout the country, and mobilising potential researchers from rural communities, government and other institutions.

In 1985, when CEF was started, there were only two BSc and four diploma level staff. By 1994 there were 15 scientific staff at CEF. Up to 2000 no staff were trained to a doctoral level. Only two staff members had masters level training; one a degree in silviculture and tree breeding and the other in forest economics. The absence of formal training was only one side of the training problem facing CEF. The other critical need was for field research experience. Aside from seven research sites for silviculture, CEF staff were not engaged in any field research. CEF's strategic plan explicitly recognised that formal academic training was not the only way to build staff capacity, although this was being pursued. Field research was seen as the other half of the capacity-building strategy. CEF could only achieve its staff development goals by giving all staff opportunities for field research and by staggering their academic training programmes (Ribeiro 1999 *Research notes*).

4.7. Field Research in Manica

Because of the war and a general lack of resources, CEF had only been able to carry out very limited field research. For CEF to have any impact on the welfare of rural Mozambicans it was essential that staff moved out of their offices and began field research (Ribeiro 1999 *Research notes*). The staff decided to initiate pilot research activities in Manica for a number of reasons.

a) It was important for CEF research staff to work closely with provincial-level agricultural, forestry and wildlife staff. Of the ten provinces in Mozambique, CEF found that Manica SPFFB was the most active in working with communities in participatory resource management activities. This provided CEF staff with a firm foundation on which to build their research efforts. Also, CEF researchers would work

closely with provincial staff and this would make it easier for research results to be applied in development programmes.

b) CEF's first research station, which began to be developed anew after the neglect of the post-independence period, was located in Sussundenga District, Manica Province. This station possessed indigenous species woodlots for research purposes. Using this infrastructure, the pilot project could be implemented more easily by field support staff.

c) Manica was historically one of the most important provinces with respect to forestry and had a major forest product industry. One of the questions to be addressed was how formal forest-based industry could be linked positively to peasant farmers.

d) Manica Province borders Zimbabwe, close to Harare, making it easy for staff to establish and maintain academic and research links with staff at the University of Zimbabwe and the Research Division of Zimbabwe's Forestry Commission. This would enable CEF staff to benefit from the experiences of Zimbabwe institutions.

e) The only diploma level college for forestry, IAC, was in this Province. This would enable CEF to provide on-the-job training/research experience in its pilot research activities for students at this college. Students at IAC would be employed in the forestry sector and their involvement in CEF research activities might be expected to have a positive influence on how they carried out their jobs.

f) Staff of Manica SPFFB and the Provincial Directorate of Agriculture were the first people to start work with community resources management in Mozambique. They had made some progress in this field but were obliged to stop their activities because of a lack of funds. By working with staff who initiated this work it would be possible to strengthen their capacity and benefit from what they had already learned.

g) Some areas of the Province suffered from extreme population pressure on natural resources, while in other areas there were very low population densities with an

abundance of resources. CEF's research could help to explain the causes and effects of population movements and the subsequent pressure on resources. It should also contribute towards identifying and testing alternative resource management strategies that would improve the economic welfare of the people and the quality of the resource base. In resource rich areas, CEF's research should be able to identify alternative resource-based livelihood strategies that might encourage people to settle more evenly across the less densely populated areas of the Province.

h) Manica Province is one of the highest agricultural potential areas in the country. At the same time, it also has great potential for the sustainable management of the natural resource base. CEF's research should be able to identify strategies for using this wealth of resources in a harmonious and sustainable way that improved the economic well being of poor rural Mozambicans.

i) The Chimanimani area on the western border of Manica Province was designated as one of the three transfrontier parks in Mozambique. A critical issue would be to identify what would happen to communities living in this area. It was hoped that CEF's research in Manica would help to identify strategies that would enable communities to become actively engaged in deciding their own futures and in benefiting from the sustainable use of their national heritage.

j) The Forestry Department at the UEM had its field research-training station in Manica. This gave CEF staff an opportunity to share research work with students and hopefully influence their understanding of community based resource management.

k) Manica Province is rich in different forest ecosystems, ranging from montane and plantations forests in the west and southwest and central plateau, to miombo woodlands in the centre and mopane woodlands in the north. Mozambican institutions had little knowledge of the ecology and management of these and other natural forest types.

Carrying out research in Manica would enable CEF to start learning about these important ecosystems and how they could be managed sustainably to benefit local people.

A focal point of this field research effort would be to learn about the existing practices that rural people used to manage and utilise natural resources in different parts of Manica Province, and to learn about local people's perceptions of the different components of their environments, their problems and their ideas for possible solutions. It was also important to investigate local perceptions of land and resource tenure.

It was also important to seek to understand the local economic value of resources and how this value could be enhanced by changing the way resources were used, and to learn who controlled decision-making about their use. Staff needed to understand how the environment influenced people's lives and how local communities influenced the environment. It was of critical importance to learn how changes in resource management and use could have a positive impact on the economic welfare of local people.

CEF's new research strategy should also enable the institution to identify and refine research methods and approaches that could be used by other Mozambican institutions to involve rural people more effectively in research and the formulation of policy. Through this participatory research process, Mozambican scientists would learn a great deal about the diversity of species in Mozambique, the dynamic ecologies of this vast country and the great potential of its natural resources.

CEF staff believed that community level research could not be completed without considering all facets of a community, including gender, social structure and age. These are critical research variables in understanding the dynamic interactions which exist between rural people, their environment and the process of development. CEF was fortunate in

having a high percentage of women scientists on its staff and thus the capacity to work effectively with both men and women in rural communities. To be truly effective in their research, however, CEF scientists would need to learn to use various methods for analysing scientifically the role of gender in resource use and management. This pilot research project was also intended to provide opportunities to learn how to use gender analysis in research methods.

CEF will never have enough researchers to work in all the districts of Mozambique. To be effective in their proposed new approach, therefore, CEF scientists continued to engage with the field staff of the Provincial Directorate of Agriculture and began to engage with members of rural communities and local authorities. To achieve this goal, the CEF would need to create an open and helpful approach to field staff and rural people and to seek out and learn from these 'local experts'.

More important, however, was that by changing the approach of extension staff toward local knowledge CEF could make a significant contribution to the capacity of participatory extension programmes in Mozambique. CEF planned to use this pilot field research programme to train capable staff, to sharpen their skills and enhance their research capacity. Staff at CEF would also seek to stimulate and catalyse curiosity among all of its staff and to support those individuals who showed research talent and an interest in expanding their understanding of local knowledge and practices. Through engagement with field staff, it was hoped that the CEF would be able to decentralise research capacity to the district level. In time, senior CEF staff could be 'supervising' the research of extension officers, game scouts and other Directorate officials at the provincial level. Doing this could help CEF to achieve its research goals. CEF therefore hoped to be able to provide modest funding to enable the most capable field staff to realise their research dreams.

4.8. Staff Development, Exchange and Dissemination

Even though CEF staff was technically skilled, they had little field research experience and no experience with participatory methods. The real first experience of CEF staff with participatory approaches was in February 1995 during a study tour to visit some joint forest management projects in India, funded by the Ford Foundation. To fill this critical gap, CEF proposed to use a series of in-service training workshops. The project would contract with resource people skilled in the use of these methods to carry out field-based training activities with project staff. These workshops would include the following:

- Staff at the CEF did not believe that it was appropriate to simply import participatory methods from outside Mozambique. Therefore it proposed to hold training workshops where a variety of participatory research methods, for example, Participatory Rural Appraisal and Rapid Rural Appraisal could be used. This would help to identify the most appropriate set of methods for the Mozambican situation and enable CEF to combine and modify these methods to meet its specific research needs.
- Similarly, CEF proposed to hold workshops for training in different field research methods for more formal scientific studies. This would help staff to gain practical experience with these methods, to understand the structure and function of rural communities, their institutions and their existing practices for using and managing agriculture and natural resources.
- To meet the needs of staff for gender analysis research, CEF proposed that a training workshop be held that would be dedicated to gaining practical experience in using methodologies for analysing gender issues in resource management.
- To complement these training workshops, CEF proposed to hold a workshop to help staff analyse the methods and the results that they produced within the context of the

tentative research strategies formulated, comprising an appropriate mix of methods that could be applied in field studies.

Another approach to training CEF staff was to provide opportunities to participate in regional exchange visits in order to learn how other researchers in the region and possibly beyond the region dealt with similar research problems. These exchange visits would also enable staff to experience first hand how other scientists implemented community-based research programmes focusing on the use and management of natural resources. CEF would try to ensure that these would be two-way exchanges. CEF staff would visit projects outside of Mozambique and would also invite outsiders to visit CEF's programmes.

In addition to regional exchange visits, CEF staff would seek opportunities for exchange visits with staff of similar projects in Mozambique e.g. they would collaborate with the staff of the Wildlife Department who were planning to carry out a pilot community wildlife project in Tete Province. Such national exchange visits would help CEF to strengthen linkages with other national and provincial institutions. The exchange activities with the Wildlife Department would contribute to CEF's efforts to establish its own Wildlife Management Division.

To further strengthen the research capacity of CEF, staff would attend short courses chiefly for special skills such as in the social sciences, resource economics, applied statistics, biodiversity and environmental protection and community resource management. For instance, the CASS/IUCN short course on social science perspectives in natural resource management was considered to be very appropriate to the needs of staff engaged in this pilot project.

During the course of field research CEF staff expected that some members of the communities involved in new initiatives would need to receive basic administrative and accounting training. CEF also recognised that communities would need help in identifying options for creating or developing local institutions for popular participation in decision making. To fulfil these needs, CEF staff should work with their research communities to find solutions, *e.g.* farmer-to-farmer visits to other parts of Mozambique and Zimbabwe, or alternatively CEF would seek expertise to meet community needs from other governmental agencies or non-governmental organisations in Mozambique or in neighbouring countries.

To enable CEF to achieve its goals and to contribute to the wider field of community resource management in Mozambique and the region, CEF needed to both share learning and to expose itself to the strengthening effects of rigorous critique and debate. To achieve this, CEF proposed several strategies for the five year period to engage with different audiences. One of the most important audiences for CEF research results would be people in the communities that CEF was working with. This was because they were the teachers and they were the supposed beneficiaries. Thus they should have been the ultimate judges of CEF's capacity building. Different national and local government agencies would also be a critical audience for CEF's research results especially the different technical divisions of the line Ministry (Agriculture) including DNFFB. CEF's experience would also be important for the UEM and IAC in terms of their role in shaping the knowledge and attitudes of future technicians. Finally, CEF felt that its research would be important and useful to international institutions. CEF realised that it needed different dissemination approaches to reach these different audiences with its research results.

CEF's dissemination strategy included five main components. The first involved an on-going approach whereby the community could share in the findings, offer critical contributions and seek to test the methods proposed. Periodically CEF would hold

community-wide meetings to review findings and to facilitate their debate and decision-making over their response.

The second strategy involved the production and distribution of publications ranging from field reports, working papers and journal and newsletter articles. Because CEF did not have the capacity to publish research documents it would contract the National Institute for Agricultural Research (INIA) for these services.

A third strategy would be convening workshops and seminars that would enable CEF staff to communicate its research objectives, achievements and challenges with technicians in the wildlife and forestry services, other key government staff, other researchers in natural resource management, community members and people from the commercial sector in Mozambique, as well as regional and international researchers. Workshops would also be used to train other researchers, field staff and community members.

The fourth strategy would be to have CEF staff participate in conferences and seminars in Mozambique and in the region. Finally, CEF would seek collaborative links with regional and international institutes. Under such arrangements, researchers and resource people from other organisations would come to work with CEF staff in Mozambique. Eventually, as the capacity of CEF's scientists improved, it would be possible for CEF staff to be resource people at research institutes in other countries.

In future years, CEF would seek other mechanisms to disseminate good practices more widely across rural areas, with the possibility of using rural radio to reach both rural-based officials and members of rural communities. Radio could operate as a one-way communication, and it is important to find ways whereby people can give feedback through the radio. A second option would be the involvement of staff and pupils in schools.

Mobile cinema could also be a very powerful tool, videos could effectively capture the experience of successful rural community initiatives.

An important part of the CEF field research programme was to identify, test and refine participatory monitoring and evaluation methods that would improve the effectiveness of research. Such methods should enable staff, in collaboration with partner communities, to track progress toward agreed objectives, and to help learn how to modify research strategies to meet the goals of the people in the rural communities with whom CEF were working.

To achieve this, CEF staff would carry out a review of literature on participatory monitoring and evaluation methods. Methods considered included focus group discussions, participatory ranking of changes and learning and farmer classification of indicators of positive change. Those methods thought to be appropriate for CEF's needs would be further researched and incorporated into different training workshops. This would enable staff to design an experimental monitoring and evaluation strategy for the field research programme. Over the course of the field work, the research team would hold assessment meetings twice a year to examine the effectiveness of this strategy and make changes as needed. These meetings would enable the researchers to evaluate progress towards the objectives, discuss problems with the research and present findings. These meetings would be documented and the proceedings published as, at least an internal report.

The results of all of these intentions and promises will be analysed in the next two chapters. However, it is noteworthy to mention here that it was this new institutional environment that allowed CEF staff to begin to work with local communities. The case studies of this thesis provide concrete results obtained as a result of the implementation of the strategies outlined in this chapter. We turn now to analyse the two case studies of this doctoral research.

Chapter Five

Two Mozambique case studies

"Only those who are ready to abandon all their preconceptions, if need be, have any hope of devising solutions that can work" (Harrison 1987: 301).

Following endeavours to change the institutional role and policy of CEF on forestry and wildlife management, as described in chapter four, actions were undertaken in the field aimed at applying the new ideas and meeting local people's needs. Chapter five will explore the lessons that can be derived from the experience of two case studies selected from the CEF research programmes with which the author was directly involved. These case studies will attempt to analyse the role played by local institutions, identifying the weaknesses that exist. This chapter also explores what are the rights and responsibilities of those currently involved in natural resource management and the various limitations that exist. Finally it will examine the resources available, and the possible constraints for such initiatives.

5.1. Context of the case studies

In this doctoral research project, two communities were selected for detailed case study investigation (see Ribeiro and Chavane 1995: 2; and 1996: 2). The first is in the M'Punga area, in Sussundenga District, Manica Province, in the centre of Mozambique, where the Moribane Forest Reserve is located. The second is in Tanga forest area, part of the Licuáti forest ecosystem, in Matutuíne District, Maputo Province, in the south of the country. Before we begin to describe and analyse the two case studies in detail, it is important to understand the broader context and policy within which these case studies were undertaken during the author's mandate as Director of CEF, between 1992 and 1999.

These two case study communities were involved in a community based resource management research project identified by CEF, and jointly funded by the Ford Foundation and IDRC, Canada. This research project was initiated in 1994. The overall objective was

to revitalise rural development through community based initiatives, based upon the management and conservation of indigenous forests and wildlife resources (Ribeiro *et al.* 1997). According to Ribeiro *et al.*, the intended project outcomes were to be as follows:

- developed and strengthened institutional capacity to enable CEF to provide policy advice and technical support in rural development and natural resource management,
- new dynamics in the development of rural communities based on sustainable use of the resources, applying participatory approaches in the management of the natural resources established and implemented,
- enhanced policy on community empowerment and development and/or strengthening the existing local institutions,
- management plans for the utilisation of natural resources established and being implemented, and
- systems and strategies for marketing of local products developed and being implemented, as well as identification of alternative income activities to reduce the pressure on the resources (1997: 2).

Following the government's new approach of encouraging community participation, the first goal of this project was to undertake the necessary research in order to perceive how strategies could be developed to involve local communities in natural resource management for economic growth. This initiative involved research and development action as well as local training (see also CEF 1994: 8-9). The research and development action was intended to verify this sustainable development initiative as being both suitable and also possessing a well-grounded scientific approach, and thus enable local communities to achieve sustainable livelihoods based upon their lands and natural resources. The purpose of local training, more precisely 'on the-job training', was firstly to

permit researchers to understand local people, their knowledge and the ecology of their lands, learning from both the local population and more experienced social researchers. Secondly, based on this understanding, it was to be able to formulate proposals in order to advance new policies and legislation on natural resources management according to the 'true' rural reality. It is noteworthy here, that most of CEF's researchers were from a forestry background, shaped as it was by the heritage of departmentalisation of the colonial and post-colonial structures, which evolved from the rapid and relentless specialisation of the different science disciplines established during the nineteenth century. In the sphere of rural development, for instance, this picture was sharply portrayed by Barry Munslow *et al.* thus: "forestry departments do not like people, energy departments do not know people, and agriculture extension services better equipped to deal with people do neither like nor know trees" (1988: 151).

A second project objective was the academic training of CEF researchers during the implementation of this project, at doctoral and masters level, in different universities, in subjects such as the social, economic and ecological management of natural resources with a view to strengthening the research institution (CEF 1994: 8-9; and 1995). Combining field research with formal staff training during the local research and development process was seen as being the most effective way for CEF to carry out its research programme, assume a high profile and have the necessary researchers trained. Long term human resource development was required to strengthen an institution that did not have the qualified research staff to accomplish its objectives. Under this scheme, CEF could benefit from 'free' external consultancy services for its programmes from outside of Mozambique. This meant, in practice, that each researcher/student would have a consultant/supervisor. This system provided at low cost, future high quality CEF research work and Mozambican experts capable of working within and outside of the country.

Research post-graduate degrees were initiated as part of the senior staff training programme, particularly involving members of the research team of the M'Punga project, as originally formulated by CEF (1995)[2].

5.2. M'Punga community in Manica Province

Throughout 1995, CEF had extensive contacts with local people, including formal and informal leaders from the communities and local governments of various localities in Manica Province, in order to chose one community with whom to initiate a natural resource management research project (Ribeiro 1999 *Research notes*; see also Ribeiro 1995 *Research notes*; Ribeiro and Chavane 1995: 2; Lucas 1999: 1-2). The Administrative Posts visited were Gondola and Zembe in the District of Gondola, Manica and Penhalonga in the Manica District, Rotanda, Mavita, Sussundenga and Dombe in the District of Sussundenga (see Figure 6 for the location of the Districts). These contacts led CEF, in December 1995, to take the decision that the focal project area would be located in Sussundenga District, within the corridor of Rotanda, Mavita, Sussundenga town, Moribane and Dombe, around the Chimanimani Transfrontier Conservation Project area in which CEF was also partly engaged (Ribeiro 1999 *Research notes*; see also Sousa, Juma and Serra 1995).

[2] Apart from this current doctoral thesis submitted at the University of Liverpool, two more research theses were undertaken (Ribeiro 1998: 7-9). The first is a Masters in Philosophy on the representativity and legitimacy of existing local institutions, which was successfully submitted at the University of Sussex in 2001. This thesis argues that the local community could probably achieve a sustainable use of the natural resources if local institutions were legitimised and sanctioned by local people (Serra 2001a). The second is a doctoral thesis on silviculture and the domestication of one of the indigenous timber species of high commercial value, which will be submitted at the University of Oxford (Ribeiro 1998: 8). A Masters study is being carried out on the ecology of the Moribane Forest Reserve, under the supervision of the University of Zimbabwe, and a Masters degree on small forest industries is expected to be admitted to one of the Canadian Universities (*ibid.*: 8-9). During the period between 1993 to 1998, three members of the CEF staff were trained to Masters level, two at the University of Stellenbosh and one at the University of Witwatersrand, both Universities in South Africa, and, in addition to this, one member did his first degree in Forestry at the University of Sokoine, Tanzania (*ibid.*: 7).

It is important to mention that the supposed presence in the area of *Chimuenges*, an armed group formed by elements of Renamo and anti-Mugabe dissidents from Zimbabwe, during the period between 1995 and 1996, caused a level of insecurity for the research team members, further impeding the field research of this doctoral project (Ribeiro 1999 *Research notes*; see also Lucas 1999: 1-2). The research undertaken throughout 1996 in the corridor of Rotanda, Sussundenga and Dombe led CEF, in early 1997, to the eventual selection of the M'Punga community, whose area included the Moribane Forest Reserve, for future work (Ribeiro 1999 *Research notes*). This community met the criteria for the selection of a case study community outlined in chapter one of the thesis.

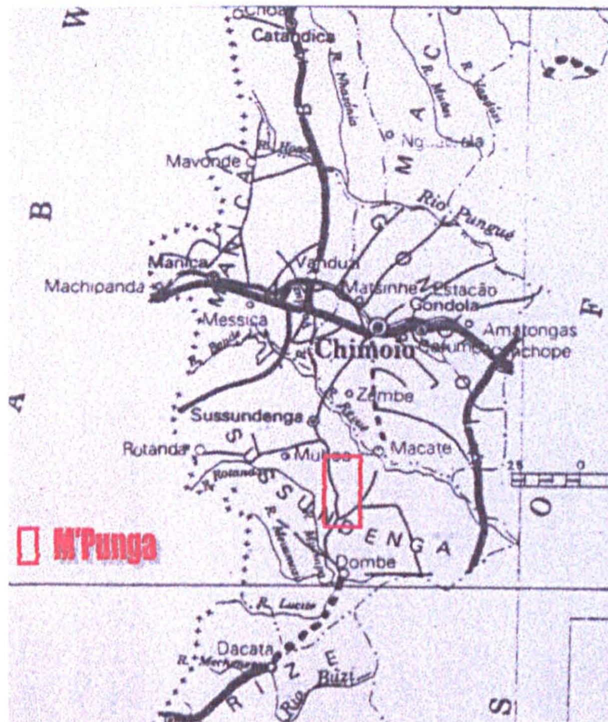

Figure 6. M'Punga geographical location.

Source: Map of the Manica Province, Direcção Nacional de Geografia e Cadastro, 1988.

M'Punga area is located in the Locality of Máquina, in the Administrative Post of Dombe, Sussundenga District, about 80 Km from Chimoio, capital of Manica Province, along the road from the town of Sussundenga to Dombe. Within the broad geographical limits of latitudes 19° 30' S to 19° 50' S, and longitudes 33° 17' E to 33° 23' E, it covers an area of approximately 120 square kilometres (see Figure 6). Inside the M'Punga area is located the Moribane Forest Reserve, created in 1950 by the colonial government by Portaria no. 8,459 of July 1950 (Boletim Oficial no. 29, 1950) covering an area of approximately 53 square kilometres. The majority of the M'Punga population belongs to the Ndau (Chindau, Njao,

or Ndzawu) ethnological group. In 1991, there were 109,000 inhabitants in Mozambique and 391,000 in Zimbabwe speaking Ndau (Grimes 2000: 3). This language is spoken in the south central region of Mozambique, particularly to the south of Beira in Sofala Province and in Manica Province (*ibid.*: 3).

According to Ribeiro (1999 *Research notes*), three specific reasons were behind the selection of the M'Punga community. Firstly there were ecological reasons. It is one of the few rain forest patches that exist in Mozambique, and after the war it was under pressure from agricultural land clearance with uncontrolled fires (see also Alves and de Sousa 1996: 3; Lucas 1999: 1). It was important to protect the slopes of the mountain and the watershed more generally by maintaining forest cover. It is a buffer zone for the Chimanimani project, part of the Transfrontier Conservation Areas (see CEF 1994: 11; Ribeiro and Chavane 1995: 2-3; Sousa, Juma and Serra 1995: 5; Lucas 1999: 1), and the Moribane reserve is part of the same ecosystem.

Secondly there were economic reasons. There is great potential for the forest to provide additional incomes for the community, from timber, medicinal plants, mushrooms, beekeeping, and ecotourism. With the development of the transfrontier conservation area in Chimanimani, along the western border of Manica Province, a critical issue had emerged: "what will happen to the communities living in this area" (see CEF 1994: 11) if they see outside support being funnelled into the 'development' of neighbouring communities but not of their own. It became urgent to develop livelihood strategies for local communities outside of the immediate boundaries of the conservation area, in order to avoid out migration of the population to Chimanimani (see Sousa, Juma and Serra 1995: 7). The chosen site was also close to Sussundenga Forest Research Station (Ribeiro 1999 *Research notes*; Lucas 1999: 1). This choice, therefore, was also part of an institutional strategy to

concentrate efforts and to utilise the few available staff and other resources to maximum effect (Ribeiro 1999 *Research notes*).

Thirdly there were social reasons. During visits to the area, contacts and meetings were conducted by CEF to try to establish lasting relationships. CEF learnt that the M'Punga community has a strong dependence on the forest resources for its subsistence (Ribeiro 1999 *Research notes*). There are also some sacred forests with important cultural and religious values for the community. Analysis of the community showed that it had a level of internal organisation and that its traditional authority structure was strong and consolidated. This situation led the research team to consider that perhaps there was no need to create new institutions and that the existing local institutions could manage the natural resources as they had done in the past.

Although there was no commitment to this project from the community at the beginning, the research team learnt that only after a good relationship had been established with the community, was the community able to make any commitment to the project (Ribeiro 1999 *Research notes*). In the early stages of contact, M'Punga community under Renamo control, were suspicious of any Frelimo government initiatives for three main reasons, as described by Ribeiro (1995 *Research notes*). Firstly, most of the local traditional leaders and people lived in areas under Renamo authority. Most of the localities of the Sussundenga district supported Renamo, particularly, from the Administrative Post of Dombe, as the author and other staff from both central and provincial government and the Ford Foundation observed in June 1995. After the first democratic elections ever held in Mozambique, which were won by Frelimo in October 1994, the local communities were expecting a special explanation, 'directly' from the *Pai* [father], the President of Renamo, of the unfavourable election results. Instead, they simply heard the results from the radio, without any clarification of why Renamo did not win the general elections. They would

have liked to have heard directly from senior Renamo staff the reasons for the election outcome. They were waiting for the promises, given in exchange for their support during the war and for the electoral vote given to Renamo, to be realised. Secondly, what they saw after the elections was, indeed, a significant Mozambique police presence in their areas, which represented for them a threatening and an intimidating situation. Thirdly, local traditional leaders were expecting official recognition from the newly elected government of their previous privileges and responsibilities, as had been the case under the Portuguese colonial regime. These were privileges removed by Frelimo soon after Independence in 1975. The traditional authorities were expecting that their powers and authority would be restored.

The local leaders could see the economic potential for the local people from the project, but they also understood their leverage, in that the feasibility of the project would depend upon receiving some satisfaction for their political and social claims. Hence during a meeting in which most of the *Régulos* of Dombe were present, in June 1995, in an attempt to introduce the Transfrontier Conservation Project of Chimanimani they said: "when WE celebrated independence in Zimbabwe, we were told who had won the elections, but here nothing. Now you come here offering us a *festa* of a project that can bring development, but we cannot attend to the *festa* until we have buried the corpse" referring to the unresolved issues of the election, (in Ken Wilson, e-mail April 4, 2001). And at the end of the meeting they said to the visitors: "You can go now and come back later, the door is not closed" (in Ribeiro 1995 *Research notes*).

Moreover, the idea of this project was different. It was a new model with a new approach, but without any local background understanding and experience. Past experience of government initiatives, such as state farm and communal village programmes, made members and leaders of the local community unwilling to readily accept any additional

new programme from the government at first sight. After Portuguese colonialism ended, the new state farm programme was seen by the peasants as "a second wave of robbery of their lands" and the communal village programme as "moving people from their land" (Munslow 1999: 9). Within this action research initiative, we gradually learned that effective community involvement depends upon attaining a satisfactory compromise between people's political and social demands, and undertaking effective and tangible endeavours to help meet the satisfaction of the community's and their leaders' basic needs, which they understand to be an obligation of any government, particularly of their elected government (Ribeiro 1995 *Research notes*).

Colonialism is without doubt objectionable, but deplorably as it is, in reality there was a better quality of livelihood, particularly in terms of minimum living conditions at that time, than there is today. Samuel Popkin argues that the colonial system of trade networks, the credit and transportation system helped to maintain peasants' livelihoods during the most difficult times without international aid (1979: 237). In effect this was the role of the *cantinas* [rural shops], which were widespread throughout Mozambique. The post-independence war, from 1977 to 1992, was a result of both external destabilisation and internal policy errors. The interests of many social groups, such as peasant producers and traditional leaders were not properly addressed by the government of Mozambique (Munslow 1999: 1). This is absolutely essential, because as Barry Munslow argues: "For most people, development in the form of sustaining and improving their livelihoods remains the absolute priority" (1999: 2). In the eyes of the local people, general elections were important because they could bring peace and then a better life for all (*ibid.*: 2). The latter implies of course, good governance and a state able to promote welfare and social stability.

In 1996, a preliminary social and ecological survey was carried out in the M'Punga area (Halafo 1996). Some of the community's major problems were identified, such as the presence of land mines, the lack of a market for the sale of bananas and maize, the lack of a maize mill and the absence of a school and a health centre. In order to produce immediate benefits for local people, and to help validate the role of CEF, build trust and strengthen a mutual relationship between the researchers and members of the local community, a grinding mill was purchased for the community. However, this premature purchase and 'well-intentioned' action from the research team brought forth a measure of friction between the research team and the M'Punga community, as well as between members of the community. We analyse this later in the chapter and explore what processes this initiative revealed for the current research.

It is noteworthy that by the end of 1998 the author realised that the research team and CEF were still perceived by local people as being outsiders and from *Agricultura*, the government agency for agriculture, livestock, forestry and wildlife, as it is known in Mozambique. Step by step, the original field strategy of this project had to be changed as a result both of local government interference in many occasions, along with several visits to the camp from top-level officials from provincial and central government (Ribeiro 1999 *Research notes*). In particular Moribane camp became a visitor's reference point for *Agricultura* in Manica Province, with a constant 'need' or imperative to demonstrate what had been 'done' by the research team.

Following the results of the preliminary social and ecological survey (Halafo 1996), the research team started to become the link between the community and other governmental and non-governmental development agencies, in attempting to find solutions to various local problems and in trying to identify new sources of income generation. It is worth noting that because of Renamo's very negative image in the international

community, during the war there were no international non-governmental organisations working in Renamo areas apart from the Red Cross in the later stages of the war. The research team also initiated work with other research institutions in order to produce more data, which could be used in a more realistic plan of action. A Participatory Rural Appraisal undertaken in 1997 by António Serra and Cândida Lucas (1997), and a planning workshop held in January 1998, served to identify the development goals and the framework for project activities. In the workshop, members of the M'Punga community, the traditional leader, government and non-governmental institutions, and the private sector were present. In this workshop, income-generating activities, strategies to involve all stakeholders in development programmes and measures to protect the natural resource base were identified. We will elaborate upon these later in this chapter.

In 2000, António Serra, a member of the Marena research team, carried out a door to door census of the M'Punga population (Serra 2000a *Field notes*). According to this census (see Table 2) there were 1,972 inhabitants in total, with 55.3% women, living in 321 households. On average there are 6.14 individuals per household. There were 90 newcomer families and the people living in the remaining 231 households are originally from the M'Punga area.

Table 2. Population of M'Punga area by *Saguta* areas in 2000

	M'Punga	Mukwawala	Tchangadela	Sutcha	Total
Inhabitants	344	758	513	357	1,972
Women	196	425	272	198	1,091
Men	148	333	241	159	881
Household	56	128	74	63	321
People/Household	6.14	5.92	6.93	5.67	6.14

Data source: António Serra's *Field Notes: M'Punga*, from May 9th to August 29th, 2000.

Table 3 shows that 23.7% of the households in M'Punga are headed by women and on average the size of the households headed by women are smaller than those headed by men.

Table 3. M'Punga people per household headed by women and men in 2000

Household	*Saguta* areas M'Punga	Mukwawaia	Tchangadeia	Sutcha	Total
Households	56	128	74	63	321
Headed by					
Women	11	33	17	15	76
Men	45	95	57	48	245
People/Household	6.14	5.92	6.93	5.67	6.14
Headed by					
Women	5.64	4.03	4.41	3.93	4.33
Men	6.27	6.58	7.68	6.21	6.71

Data source: António Serra's *Field Notes: M'Punga*, from May 9th to August 29th, 2000.

We could expect the phenomenon of migratory male labour to be a main reason for the significant number of households headed by women (see First 1982), but in the M'Punga case it was found that only one woman had her husband working in South Africa (see Table 4). The primary reason for the large number of female headed households is the existence of a large number of widows in the community, representing 51% of the total households headed by women, most probably as a result of the war. The second reason for women living only with their children is that these families are normally part of some existing extended families headed by men, but living in different households, and these represent about 38% of the total households 'headed' by women.

In the local tradition, the man may have two or more wives living in the same household or in different households and in this case these wives normally live only with their children (see also Adegboyega *et al.* 1997: 28-30; Armstrong 1997). These polygamist families are intended to improve their male head's economic power. It is interesting to note that about 9% of the women who headed households were divorced. A

further study on this detail is required in order to understand the reasons for this. Only one divorced woman declared that she came to M'Punga from a neighbouring community before the war seeking better land. 58% came to the M'Punga area because of their marriage, either before or after the war. Only three women still leaving in M'Punga came during the war, presumably following their soldier husbands. Of the remaining women, those who have not responded, only one came during the war, in all likelihood following her husband to the battle-field.

Table 4. The status of households headed by women in M'Punga community in 2000.

Household headed by Women	Divorced	Extended families	Husband absent	Widows	Total
Originals	5	20		27	52
Newcomers	2	9	1	12	24
Total	7	29	1	39	76
Newcomers' reasons					
Better lands	1				1
Marriage	1	8		5	14
War				3	3
Unknown		1	1	4	6
Total newcomers	2	9	1	12	24

Data source: António Serra's *Field Notes: M'Punga*, from May 9th to August 29th, 2000.

The fact that migrant labour is irrelevant in M'Punga does not excluded the hypotheses that M'Punga is also part of a regional socio-economic and political network which extends from Sofala to parts of Zimbabwe, based on a common ethno-linguistic homogeneity across this zone independent of existing international borders and different colonial histories.

In order to understand local people's behaviour for this 'local' research and development project, we turn now to analyse the nature of traditional leadership in the M'Punga community.

5.2.1. The hierarchy of M'Punga's leadership and its role in the community

The *Mambo*, the local name for Chief, is the traditional leader of the M'Punga community. The *Mambo* has to preserve both the social harmony of the community and the natural resources of the area. In order to support the *Mambo* in the fulfilment of his duties, he has his own council of elders and *cabos de terra* [a body of auxiliaries]. The council of elders is a body of counsellors to assist him and to give him opinions on any subject and to help in the resolution of social conflict. The body of auxiliaries is, in fact, a body of police, informants and messengers of the *Mambo*.

The area of the M'Punga *Mambo* is parcelled into four *Saguta* areas, namely Mukwawaia, Sutcha, Tchangadeia and M'Punga (Interview: Nhangambire M'Punga, Moribane Forest Reserve, January 15th, 1998; see also Serra 2000 *Research notes*; and Serra 2000a *Field notes*). In each *Saguta* area there live a number of families, ruled by the respective *Saguta*, except in the *Mambo*'s own home area. The households are strategically located to protect their lands. Mukwawaia has, for example, about 128 families, Sutcha 63, Tchangadeia 74, and M'Punga 56 (see Table 3). At this micro local level, the *Mambo* is represented by *Sagutas*, who are also regarded as local leaders by the community, however, they are hierarchically subordinated to the *Mambo*. *Sagutas* are the *Mambo*'s arms and represent lines of communication between the *Mambo* and members of the community in their areas.

Sagutas have also to secure both social harmony and the natural resources of their micro areas. Each *Saguta*, as with the *Mambo*, also has his own counsellors to assist him in a variety of matters, including conflict resolution, and a body of auxiliaries to perform at micro level the role of police, informants and messengers. The *Saguta*'s role in promoting social harmony is principally exercised in the resolution of local conflicts, and also in

organising ceremonies and other social events. Normally any social conflicts are firstly solved locally by the *Sagutas*. Only in the case of a *Saguta* being unable to solve a problem does he then transfer the matter to the *Mambo*. *Sagutas* control the use of natural resources particularly in determining land allocation (see also Alves and de Sousa 1996: 3). However, in land allocation, the final decision always rests with the *Mambo*. The normal process of requesting land and land allocation proceeds from the *Saguta* to the *Mambo* but it has been flexible. A request for land can be made at both levels. Yet it is the *Mambo* who ultimately decides on land allocation and defines the boundaries, as well as specifies to the users community rules, such as the use of water in the rivers or the cutting of trees at the watersheds.

In July 1997, when the research team started to work with the community the *Régulo* informed the team about four of the local social norms (Ribeiro 1999 *Research notes*). First, people cannot wash dishes in the rivers. Second, people cannot take a bath with toilet soap in the rivers. Third, in Muchanga, Tave and Mussapa rivers, it is forbidden to drink water by hand only by using the *cabaça* (a local utensil/vessel that has the form of a container/mug with a long stick attached). Fourth, sex cannot be conducted in the forest and under the *céu aberto* [open sky]. According to the *Régulo*, violation of these norms could provoke a spirit reaction and brings bad luck and misfortune (see also Lucas 1999: 4-5). For instance, he reported that "if you take a bath with toilet soap you can see a white monkey", which means that something bad and serious will happen to you or to your family, for example treading on a landmine. These four norms reveal that there is a consciousness in the community of the need to preserve locally clean water in the rivers for everyone's use and public morality to ensure social cohesion.

The *Mambo* and *Sagutas* have been established by lineage and are leaders for life in the M'Punga community (Ribeiro 1999 *Research notes*). By local tradition, the *Mambo*'s

successor after his death, is determined by the council of elders, which takes into account the Mambo's family opinion. However, according to local rules, the succession to the throne in M'Punga has been from father to son and normally the successor is the first son of the first wife (see also Serra 2000b). But succession can also be from the older brother to the younger brother or nephew, in the case of the *Mambo* having no son, or if the son is still not ready for the throne or he is absent. The son may, however, take over the succession when he reaches adulthood or returns home, replacing the interim appointment. After the final decision on who will be the next *Mambo*, the council of elders announces the name of the new *Mambo* to the community. People from the *Mambo*'s area have to contribute products, such as sorghum for the beer, for the ceremony of the *Mambo*'s investiture.

The *Sagutas* have been appointed by the M'Punga's *Mambo* after consultations with both the council of elders and community members from that specific *Saguta* area in a community meeting. Nowadays, the successor is normally from the same lineage as the previous *Saguta*, but someone from outside of the lineage who is an outstanding member of that community, even if his origin is not from that area, could be designated as the *Saguta*. The choice of *Saguta* depends on his behaviour, dynamism, social relationships with other community members, and his knowledge of the area and of the people who live in that area. For instance, the Sutcha *Saguta* was appointed because during the civil war he was active in both mobilising his community and raising logistical support for Renamo. In the past, when the *Mambo*'s area was expanded by conquest or when his influence was extended to other neighbouring communities, the *Saguta* also appointed by M'Punga's *Mambo* was normally a close relative or a trustworthy collaborator.

Today, the *Mambo* is also acknowledged as *Régulo* ever since the period of colonial consolidation in Mozambique. Under the system of Portuguese colonial

administration, the *Régulo* had the rank of Chefe de grupo de povoações [Chief of a group of villages]. The *Saguta* by local tradition, were representatives of the *Régulo* and were also categorised as *Chefe de povoação* [Chief of the village] under the Portuguese colonial system. The M'Punga *Mambo* was subordinate to the paramount *Mambo* of Moribane by local tradition, but with the consolidation of the colonial system in Manica province, he came under the paramount *Mambo* of Dombe when the Portuguese opened the Administrative Post of Dombe in the District of Sussundenga. Possibly this was due to difficulties of access to communicate with the *Mambo* of Moribane, who was still living in the mountains. It is important to note that the Portuguese gave the name of the paramount *Mambo* of Moribane to the Moribane Forest Reserve.

According to the elders, the first *Mambo* of M'Punga, was Mahuruca M'Punga, appointed by Ngungunyana, the Emperor of Gaza, because of his belligerence and audacity during the process of expansion of the Gaza Empire, probably between 1861 and 1868 (meeting in January 15th, 1998 in Ribeiro 1999 *Research notes*; Serra 2000 *Research notes*). The second *Mambo* was Mahuruca's son, Quichira M'Punga, who died in 1953. Because the two sons of Quichira M'Punga were absent working in South Africa and Rhodesia, now named Zimbabwe, Quichira's brother and uncle of the present *Mambo*, Seda M'Punga, took over the *Mambo* seat until the independence of Mozambique, in 1975, when the traditional leadership was abolished by Frelimo. He died in 1994. During the civil war, the local traditional leadership was re-imposed when the area fell under Renamo control. In 1984, Nhangambire M'Punga was indicated by Renamo as the successor of Quichira M'Punga (meeting in January 15th, 1998 in Ribeiro 1999 *Research notes*; Serra 2000 *Research notes*). Nhangambire, however, was the second son of the first wife of Quichira M'Punga and, according to the local traditional succession system, it should have been his older brother, who was at that time a refugee in Zimbabwe. When the legitimate

successor came back from Zimbabwe, the first son decided to move to another area in order to avoid conflicts within the family (Serra 2000 *Research notes*).

As a concluding remark we can observe that the M'Punga's traditional leadership has no democratic mandate in the sense of people participating in the selection of their leader(s). The leader has always been appointed either by someone powerful from outside of the community, as happened in the case of the Emperor of Gaza and later of Renamo, or from inside the community, by the *Mambo* or his council of elders. Although on occasions local people are consulted, they are normally informed of the decisions. The reasons why the local people accept a new leader may vary. It can be because of the charisma of the new leader and/or by the sanction of local succession traditions, or it may simply be that the people believe it may help them to live in peace and/or to coexist with 'invaders'. However, the proposed new leadership is not always accepted and neither does the appointee always represent local people's interests, as we will see when subsequently we recount the history of the white elephant of Moribane. We turn now to examine the relationship between the local people of M'Punga and the research team of CEF.

5.2.2. Relationships between the M'Punga community and the research team

After the Peace Agreement in 1992, almost all initiatives from any government institutions were seen by locals of M'Punga as an attempt by Frelimo to gain influence and the support of local people in order to increase their chance of electoral success. State civil servants or government officials were viewed primarily as being Frelimo members with an agenda of politically mobilising people rather than carrying out their civil servant duties (Ribeiro 1999 *Research notes*; see also Sousa, Juma and Serra 1995: 4). The early resistance of *Régulo* M'Punga to meet the research team and work with CEF staff and to

mobilise the community for the natural resource management programmes is evidence of this, as confirmed also by Marena (2000: MZ02). This resistance from the *Régulo* was also a reflection of an anxiety felt by almost all community members. They were suspicious and feared that the research team was trying both to re-impose the forest guard system, as in the old days, and to expropriate the land in favour to white farmers from South Africa and Zimbabwe, as had been happening in other districts in Manica Province (see Serra and Claver 1996; Ribeiro 1999 *Research notes*; Serra 2001b).

According to the recollections of some older community members, the former role of the forest guard was to restrict access to natural resources of the forest reserve, to reinforce the law and punish the '*infractor*', as happened during the colonial period (Ribeiro 1999 *Research notes*). Serra described the guard's role as being "to control and to supervise the community's activities inside and around the reserve, such as the cutting of forest in order to farm" (2001a: 1). Hence: "The guard had the power to restrict the expansion of farms within the reserve area, forbid more people to come to live in the reserve, control hunting, and punish those setting uncontrolled fires" (*ibid.*: 1). In addition, the M'Punga community knew that in certain parts of Manica province some outsiders, supported by government land licenses, were expropriating land from local people, and people were promptly being removed from their own lands (Ribeiro 1999 *Research notes*).

Another idea prevalent in the community was that the research team came to 'protect' the forest only to ensure exploitation of the timber. This may possibly have been the product of some general statements made by government officials, which were in fact stressing the need for the conservation of a few selected timber species. For instance, remarks were made such as "*Umbila e Panga-Panga são proíbidas de cortar porque são de grande valor madeireiro*" [it is forbidden to cut *Umbila* and *Panga-Panga* because they are of great value as timber]. Such statements were common and repeatedly used by forest

officials. In the areas with trees of *Umbila, Pterocarpus angolensis*, and *Panga-Panga, Milletia sthulmannii*, it is prohibited to cut those trees even if located in fields designated to be cleared for farming. Such fears were stoked up because at that period of time, locals witnessed a number of private timber enterprises, with forest exploitation licences, cutting those tree species in areas adjacent to the forest reserve.

However, with '*o problema do elefante*' [the elephant problem] in Moribane Forest Reserve, this relationship between M'Punga community and CEF slowly began to change.

5.2.3. The white elephant of Moribane

Towards the end of 1997 and the beginning of 1998, the research team started to obtain information from peasant farmers from M'Biquisa, in Mukwawaia *Saguta* area, about the presence of elephants in the M'Punga area, particularly because the elephants had started to destroy some of their banana and maize crops. Before, the local people had never discussed the problem of elephants in the area. The mountainous area of M'Biquisa within the Moribane Forest Reserve is covered by a type of vegetation similar to rain forest, offering excellent protection and hideouts for people and soldiers. During the civil war, most M'Punga people and even some outsiders moved to the area to take advantage of the forest cover as protection from any possible attack or raid (Ribeiro 1999 *Research notes*; Serra 2001b: 1). After the war, not all of the people left the M'Biquisa area. Instead they began to settle down and open up farms, in what was previously an elephant corridor (Ribeiro 1999 *Research notes*; Serra 2001b: 1). At that time, access to M'Punga area by civilians was considered to be risky at best and critically dangerous at worse and the road was virtually abandoned therefore.

In June 1995, during the author's first journey between Dombe and Sussundenga along the Moribane Forest Reserve, the author had the opportunity to closely observe the road conditions and multiple signs of the recently ended war (Ribeiro 1995 *Research notes*). In fact, the road was virtually completely covered with 'elephant' grass and in many places, specially in 'open' areas, the height of the grass was the same as that of the 4 x 4 vehicle being driven, cutting visibility and speed and demonstrating clearly that the road had not been in use for years. The wheel tracks were identified by the slightly different tone in colour of the grass. From time to time, one could also see the skeletons of abandoned tanks and electric transmission suspension towers blown to the ground during the war. This trip was peculiar. In the recent words of Ken Wilson: "it's funny to remember those times. Pedro Garicai alone if the first vehicle *blows*, 12 of us squeezed into the second... landmines" (e-mail April 4, 2001). The author to emphasise the context of the danger introduced the italicised word. In Dombe town, only the walls of a few buildings remained, which were open to the sky. However, the verdant green of the Moribane forest indicated that not only had the forest safeguarded the people, but also the people had protected the forest.

One possible reason, with deep cultural roots, to keep the presence of elephants secret is that "some people believe that the elephants are closely intertwined with the spiritual realm" (Marena 2000: MZ03). As the Marena team have described: "There is believed to be one powerful spirit elephant named Jain or Jani, who leads the group, and cannot be killed, even by automatic weapons. Anyone wishing to kill an elephant must conduct careful rituals beforehand. The hunter's wife must observe certain procedures whilst he is away hunting, or risk placing her husband in great danger" (*ibid.*: MZ03).

Another possible political-military reason for the secrecy of the presence of elephants in the area was to avoid visits and the presence of outsiders in an area where it

was presumed that some of the inhabitants were "guarding arms caches, left over from the war" (Marena 2000: MZ03). As mentioned before, the supposed presence in the area of *Chimuenges*, during the period between 1995 and 1996, caused a level of insecurity particularly for the research team members. It seemed also that the presence of the rebels does not pose an immediate threat to the local community. As reported by both the research team members and locals in May 1998, the resistance of a few peasants to move away from the elephant corridor was apparently associated with the existence of hidden stores of Renamo's weaponry (Ribeiro 1999 *Research notes*).

In May 29th, 1998, the author not only observed locally the havoc provoked by the elephants in some farms in the M'Biquisa area, see Figure 7, but also noticed the tension between Frelimo and Renamo oscillating between cooperation and confrontation, and the presence of two authorities in M'Punga (Ribeiro 1999 *Research notes*). Three years later, António Serra reported that the five households who remained in the affected area maintained their stance that they were in favour of continuing to fight the elephants rather than abandoning their fertile lands (2001b: 13). In the last week of August 2000, the police destroyed an arsenal in the area, and those remaining five households moved out of the area (*ibid.*: 13). These local-level tensions, in the words of Alcinda Honwana "reflect both the deep social divisions spilling over from the long war and the desperate survival tactics of many Mozambicans attempting to rebuild their lives in the face of overwhelming poverty" (1998: 1). Apparently for the M'Punga community, Frelimo policy at the local level proved not to deliver a better livelihood and Renamo's ability to deliver still needs to be proved. Prior to continuing, it is important to note two aspects in order to understand the strong influence of Renamo in M'Punga community: firstly Ndau speakers have dominated Renamo and secondly Renamo's support comes "mostly among the rural poor" (Accord 1998: 2). Given the recent history in Manica province, Frelimo is seen as being the party of

urban people, of outsiders, while Renamo is recognised as the party of rural people (Marena MZ10). Note that the President of Renamo won 66% of the votes in this province (CNE 1999).

Figure 7. Are you 'governing' elephants or people?

Photo taken by António Serra during a survey of the damage done by the elephants in the M'Biquisa Area, in Moribane Forest Reserve, District of Sussundenga, undertaken by the research team in May 29th, 1998

By early 1998, when the elephants started to create more serious damage and began to destroy the livelihoods of the peasants by crop raiding, the elephant problem had become a central source of conflict between the local community and government, and later between some members of the community and their leader. Initially the community demanded that the government should shoot the elephants or at the least kill one in order to encourage the elephants to leave the area. The government was unwilling to kill any elephant as they felt that there was a need for conservation of the elephants in Moribane

Forest Reserve, and they believed that ejecting the elephants in this manner would only offer a temporary solution (see also Marena 2000: MZ03). Moribane area is seen today as a natural corridor for elephants moving from the lowlands, east of Machate to the Mahate plateau (see also Marena 2000: MZ03).

One of the possible solutions presented by the community was the construction of an elephant-proof fence. This proposal came from a newcomer from Sofala province, with a relatively large private farm inside Moribane Forest Reserve, since he envisaged that some external funding could be available from the CEF project. The Forest and Wildlife Provincial Service concurred with this idea in principle but argued that all of the farmers would have to be concentrated in one area in order to make the fence practicable. This worried local people who feared that this might lay the groundwork for a reintroduction of the old style Frelimo communal villages. This also precipitated a debate between farmers living along the main road, between those who desired to stay within more easy access to the outside world, and those living in the forest, who would rather stay where they were with the better soils (see also Marena 2000: MZ03). This dispute, as observed by the Marena team, "was never resolved, and the idea of a fence was shelved" (2000: MZ03).

Evidence was presented by the Marena team from a meeting held between the community and the government, which "was called in May 1998 at the community's request, to resolve the problem. The meeting became very heated. Farmers living in the area affected by the elephants demanded that game scouts should shoot the elephants. However, the Chief disagreed, saying that the basis of the elephant problem was spiritual; it was due to the absence of a young woman who had been dedicated as spiritual guardian of the forest, but had been sent away by her father. As a result, the spirits were unhappy and sent the elephants" (2000: MZ03). Thus: "Since the problem was seen to be in the spiritual realm, the Chief argued that the solution lay there also. Ceremonies would have to

be conducted. It was eventually agreed that the ceremonies would be organised jointly by the Chief and the government" (*ibid.*: 2000: MZ03).

By the middle of 1998, the elephant conflict became more acute. Firstly, this was because the traditional ceremonies had not yet been carried out according to the local customs. There were a variety of possible explanations for this. *Régulo* M'Punga was powerless or unwilling to organise the ceremony, or perhaps he just did not want to do so. For some peasants, the ceremony should be organised only by the real leader, according to traditional customs. Because of the urgent need to solve this problem some members of the community began to question the very legitimacy of the existing traditional leader. Secondly this was also considered to be a result of the government's failure to effectively shoot the elephants following two abortive attempts. The first failure was due to heavy rain and the second because the hunters did not find any elephants in the area. The lack of success of the government in locating the elephants reinforced local beliefs that the solution really lay in the spiritual realm.

By the end of 1998, "after realising that the government would not take action on the elephants, and that the Chief would not support them, farmers started to move out of the affected area" (Marena 2000: MZ03). Some of the farmers took the initiative to ask CEF to provide transport for their move. Some of the farmers moved to the northeast of the forest reserve, others to the south of M'Punga area, and a few to the neighbouring Chiquizo chieftiency. Most of these farmers were opposed to the government's approach, which was to avoid shooting the elephants. They saw this as a demonstration that the government was more interested in wild animal protection rather than in the welfare of people, hence "for many residents in Moribane, the problem is one of government inaction to protect them from wild animals" (Marena 2000: MZ03). When government agents make the argument that the elephant is a valuable asset for local people while the same elephants have just

devastated their crops, and at the same time the government argues against burning grass, which is the only viable way to clear the land for new *machambas*, one can imagine what this implies for relations between the community and government (see Pijnenburg 1999: 5).

The Marena Thematic Briefing bears quoting at some length to provide some of the nuances: "One reason why the Chief took the line that he did, and effectively sided with the government, may be because he also wished to see the farmers move from the area affected by elephants. Many of these farmers had settled during and after the war without his permission, and did not respect his authority. He may have suspected, rightly as it turned out, that they would be forced to leave by the elephants. Indeed, he took no action to actually convene the ceremonies. If this interpretation is correct, it is an example of the spirits being used as a political tool by the 'spirit handlers'. An alternative explanation, offered by one of the residents of the area affected by elephants, was that the Chief was afraid of interfering in the 'elephant problem' because of his own lack of legitimacy in the spiritual world. The Chief himself had been put in charge during the war by Renamo, after his brother, the rightful heir to the Chieftainship, had fled to a government-controlled area. The ancestral spirits, however, know who should be Chief. If the current Chief attempted to contact them during a ceremony for the elephants, his fraud would be revealed, and he would be punished" (Marena 2000: MZ03). As argued by the Marena team, "if this interpretation is correct, it is an example of the spirits being used as a political tool by the spirit handlers" (2000: MZ03). We would comment that this will always be the case!

What *Régulo* M'Punga had not said, was that the young woman sent away by her father (also in Marena 2000: MZ03) was because her marriage violated local traditions. This fact brought into relief the legitimacy of the *Régulo* M'Punga. According to local rules, the spiritual guardian of the forest cannot marry anybody. She can maintain a normal

sexual relationship with any person and even have children, which are considered 'children of the spirit', but she cannot leave her parents' home to live with another man because she is the wife of the first M'Punga *Mambo*'s spirit. The woman appointed by the former *Mambo*, Seda M'Punga, decided to marry and leave her parents' home, to live together with her husband outside M'Punga. This meant that she ran way from the *Mambo*'s home to live with another man and thereby dropped her local traditional duties. It is only the 'real' *Mambo* who has the power to choose the woman to be the spiritual guardian of the forest. As both *Régulo*'s father and uncle are dead, only his older brother, the first *Mambo*'s son, has the legitimacy to appoint another women to carry out the local ceremonies.

As this problem had not been solved according to traditional norms, and the *Régulo*'s legitimacy came to be questioned by local people, *Régulo* M'Punga began to be more open to CEF initiatives and to other government institutions in an endeavour to find outside support to bolster his formal recognition and authority in a manner that would help him to maintain his leadership within the M'Punga community. Evidence of this was provided by the *Régulo*'s increasing participation in government programs and in mobilising the community for control of fires and other activities, such as beekeeping and fishing. He started to have more contact with local government institutions and participate in activities such as the census, health and education programs, and collection of tax (in Serra 2000, *Research notes*).

Another possible reason of the *Régulo*'s participation in government's programme and probably also of the M'Punga community openness to the research team members is that Renamo urged local people to cooperate with the government in the Moribane conservation programme during the electoral campaign in Dombe, in November 1999 (Marena MZ10). In detail, one of the Renamo's representatives during the political meeting prior to the second elections, held at the Sanguene School, said: "*Aqueles que*

estão a trabalhar convosco, estão aí para ajudar, não dificultem o trabalho deles, trabalhem com eles" (from the Interview with António Serra, Liverpool, December 29, 2000). Literally translated: "Those who are here working with you, they are here to help you, do not make their work difficult, work with them" referring to the research team members.

In June 2000, an interview undertaken by António Serra with *Régulo* M'Punga revealed the following: "*agora é bom que venha mais gente para viver em M'Punga porque quanto mais pessoas vierem viver mais impostos serão cobrados*" [now it is good that more people come to live in M'Punga, because the more people that come to live here, the more tax will be collected]. The *Régulo*'s thinking was to open the door for more people to settle in the area, in order to obtain more revenue from the tax collection, since a percentage would be kept for him (Serra 2000, *Research notes*). In other words, this implied an increased population pressure on local resources, particularly in the Moribane Forest Reserve.

The fact that *Régulo* M'Punga could now collect tax, precipitated a new conflict on the community's boundaries. The *Régulo* began to claim that his domain covered a larger area in order to have more people from whom to collect tax, arguing that the M'Punga's original area included part of the existing Sanguene chieftaincy. Hence, he demanded that Sanguene Primary School should be called the M'Punga Primary School. According to *Régulo* M'Punga, the school was in the original M'Punga area (Serra 2000, *Research notes*). Another example of such demands occurred in March 2000, when one of the shops in Sanguene was destroyed by a fire. The M'Punga *Régulo* interpreted the incident as a result of negative spirit reaction, because the ceremony was undertaken by the *Régulo* Sanguene, instead of by himself, as the shop was within the original demarcation of the

M'Punga area. In June 2000, in order to avoid more incidents, the shop owner asked *Régulo* M'Punga to conduct another traditional ceremony (Serra 2000, *Research notes*).

The evidence presented above, of a renewed openness to government, and claiming more land under his jurisdiction indicate that *Régulo* M'Punga is seeking rational-legal authority by gaining recognition from the government of his role, by eliciting a measure of charismatic authority from his people through his pursuit of the boundary conflict, and by increasing his economic power through tax collection. In other words, he is looking for self-empowerment. It is noteworthy here, that in fact, it is the *Saguta* who collects the tax from the people of his area, then gives it to the *Régulo* and the *Régulo* takes the money to the *Posto Administrativo*.

5.2.4. The impact of the imposed community committee

Initially the field strategy for this research project was to work with the existing local institutions in the implementation of the proposed sustainable development programme (Ribeiro 1999 *Research notes*). The principle of CBNRM projects is that the creation of committees or other new institutions or community bodies, should arise as a consequence of the sustainable development process and be based upon decisions taken internally by the community. However, in M'Punga this principle was gradually overturned as a result of external pressure and local politics. The on-going process of project implementation in M'Punga led to a gradual transformation from an emphasis on sustainable development to a new emphasis on community conservation. Once again, outsiders were imposing their idealised model of 'community development' (see Ribeiro 1999 *Research notes*; Serra 2000 *Research notes*; Serra 2001b: 14).

As result of the initial delay and resistance of *Régulo* M'Punga to collaborate with the research team, the District Administrator of Sussundenga and the local research team of CEF began to suggest the creation of a local community committee to deal expeditiously with natural resource management (see Ribeiro 1999 *Research notes*; Serra 2000 *Research notes*; Serra 2001b: 14).

With the formation of such a community committee, the local research team envisaged that this would facilitate contact between themselves, local leaders and community members, in order to permit the dissemination of ideas about the research project and natural resource management more easily and rapidly amongst members of the community (Ribeiro 1999 *Research notes*; Lucas 1999: 13; Serra 2000 *Research notes*; Serra 2001b: 14). Cândida Lucas has argued that "it is through the committee that all of the activities' programmes outlined by CEF reach out to, and are discussed by, the community" (1999: 13). This committee would also permit a community body to be responsible for operating the grinding mill, that was inactive and simply being stored in Sussundenga since its purchase by the project in 1997 (see Ribeiro 1999 *Research notes*; Lucas 1999: 12; Marena 2000: MZ09; Serra 2000 *Research notes*; Serra 2001b: 14).

At the beginning of the project, the community believed that the research team intended to give the grinding mill to the M'Punga *Mambo*. This impression was probably formed because when CEF asked the community to indicate a location for the grinding mill house, the *Mambo* suggested a place near to his home (Ribeiro 1999 *Research notes*; Lucas 1999: 12; Serra 2000 *Research notes*; Serra 2001b: Box 1). Since there was no another representative community body that the project could designate to operate the grinding mill, this appeared to offer an obvious solution. However, some community members proposed giving the grinding mill to a local private entrepreneur (Ribeiro 1999 *Research notes*; Serra 2000 *Research notes*; Serra 2001b: Box 1). The research team, and particularly

the author, originally perceived such a move as prejudicing community participation in favour of private sector development in the area (Ribeiro 1999 *Research notes*; Serra 2000 *Research notes*; Serra 2001b: Box 1).

The author, as overall director of the project, decided to hold out until the locals had a more developed 'awareness' of community work (Ribeiro 1999 *Research notes*), and hence "wait until the local community had had more time to think over their priorities (Serra 2001b: Box 1). Later, António Serra described the reasons for this distrust: "First was the location of the grinding mill. The chief did not ask the other members of the community. He decided to locate it near his house. This caused different interpretations - such as that the project was buying off the chief with a grinding mill. As it was located near the chief's house, it was feared that every woman who went to the grinding mill would lose time in traditional formalities (i.e. paying compliments to the chief), and this was also viewed with some distrust by some men" (Serra 2001b: Box 1).

In retrospect, and on reflection, the author's dictum impelled community members to accept the outsider's ideas of community participation by insisting upon the creation of a community committee in order to set the grinding mill into operation in the area. A further set back was that: "In addition, the constitution of the committee was viewed as being similar to the cooperatives created after independence and which had been seen as a failure" (Serra 2001b: Box 1).

According to some locals, the recommended community committee was a tactic by the research team to recruit young people, both boys and girls, to *Serviço Militar Obrigatório* [compulsory military service] for the government (Lucas 1999: 14; see also Marena 2000: MZ09; Serra 2001b: 14). Moreover, the perception of some members of the community saw the grinding mill building as being a local prison for any transgressors. The house that was built later for the grinding mill was actually of a weak construction

with fragile material precisely to facilitate any 'prisoners' to escape (Interview António Serra, Liverpool, December 29, 2000; also in Serra 2000 *Research notes*; Serra 2001b: Box 1). All of the above show how important it is to be aware of people's perceptions when developing initiatives.

The local community leaders refused the criteria suggested by the research team to select members for the community committee. The proposed criteria were that the members of the committee should be chosen in a general meeting, and that some women should also be appointed, in order to assure a more balanced gender representation in the community committee (Ribeiro 1999 *Research notes*; Serra 2000 *Research notes*; Serra 2001b: 14). In July1998, the outsider's demand for a local community committee for resource management was formally acceded to (Lucas 1999: 13). However, it was constituted by ten men who were appointed by local people in local meetings organised by their own *Sagutas*. In each *Saguta* area, two people were identified (Ribeiro 1999 *Research notes*; Lucas 1999: 14; Marena 2000: MZ09; Serra 2000 *Research notes*; Serra 2001b: 14). Two more persons were also indicated by the people of M'Biquisa area, part of the *Saguta* Mukwawaia, where the elephant problem was present (Ribeiro 1999 *Research notes*; Serra 2000 *Research notes*). No women were appointed. The criteria used for the selection of members for this committee was an ability to speak Portuguese and to be young. It seems that the traditional leaders' strategy was to have a body with the capability to communicate with outsiders, specially those from the government, but without any local decision making authority that could compromise the community's interests (Ribeiro 1999 *Research notes*; Marena 2000: MZ09; Serra 2000 *Research notes*; Serra 2001b: 14).

This committee simply became a body of messengers and translators, local escorts, participants in the government fire control programs and voluntary managers of the grinding mill, rather than the authentic managers of the local natural resources (Ribeiro

1999 *Research notes*; Marena 2000: MZ09; Serra 2000 *Research notes*; Serra 2001b: 14). According to Marena, "an additional factor is that the committee members are subordinate to and take instructions from the Chief, *Sagutas* and other local elders. In general meetings, the committee members do not play an active role, mostly remaining quiet. The committee has no terms of reference, and in practice refers every important decision to the Chief, or to the project's technical staff" (2000: MZ09; see also Ribeiro 1999 *Research notes*; Serra 2000 *Research notes*; Serra 2001b: 14). This represents the real local power shadowing 'official' structures.

The Marena team describes local perceptions as follows: "Most people in the M'Punga chieftaincy claim to know little about the CBNRM project and the community committee. They appear to feel little control over, or responsibility for, the activities of either. For example, when the grinding mill operators requested to be paid a salary, the people present at meetings told them to go to the project staff for salaries. This may be linked with local belief that if someone gives you money, whatever results from the use of that money belong to the original donor. Those who do know something about the committee believe it is mainly responsible for patrolling the community and punishing people who contravene government rules on clearing land with fire and cultivating near rivers" (2000: MZ09).

5.2.5. Top-down versus bottom-up approaches for local income generation projects

As a result of the planning workshop in 1998, some income generating activities were introduced, such as fishing and beekeeping, in order to improve the income of the people and reduce their dependence on the natural resource base (see Ribeiro 1999 *Research notes*; Lucas 1999; Marena 2000: MZ08; Serra 2000 *Research notes*). Originally

the initiative came from the project and these alternatives were introduced with the aim of maximising the number of people participating. But soon CEF learned from experience that people were not motivated to participate in these income-generating initiatives (Ribeiro 1999 *Research notes*; Marena 2000: MZ08; Serra 2000 *Research notes*). Later, the strategy adopted was only to involve those persons demonstrating a willingness to participate in such initiatives. As discussed in Chapter 4, this strategy was based on the forestry practice of the Manica Province Forestry and Wildlife Service at the end of the 1980s and the beginning of the 1990s, which indicates that new and more productive systems meant a combination of government structures working alongside of key members of local communities (see also CEF 1994: 4). If the initiative was successful, then the results could be disseminated within the wider community, and stood a better chance of attracting wider participation. Hence, support was given only to those members of the community who showed an interest in establishing activities in the area of beekeeping and fish farming. As a consequence, and following positive results, other members of the community did indeed become interested in participating and began beekeeping and/or opening up their own fishing dams. The end result was an increased number of beehives and dams in M'Punga (see Lucas 1999: 12-13; and Marena 2000: MZ08).

In July 1998, the beekeeping program began with a study undertaken by the Mozambican Association for the Development of Rural Women, to evaluate its future potential and the willingness of local people to improve their skills and produce a commercial quality of honey (Lucas 1999: 12). This programme was initially designated exclusively for women, but in practice many men took a lead in the activity (Marena 2000: MZ08). Fifteen community members from the area of *Saguta* Mukwawaia were voluntarily trained, and all of them received the necessary equipment on credit (Lucas 1999: 12; and Marena 2000: MZ08). After the first honey sales, people from area of the *Mambo* M'Punga

and *Saguta* Sutcha, who had previously dropped the programme, showed an interest in participating in the beekeeping initiative (Lucas 1999: 13; and Marena 2000: MZ08).

In 1999, the fish farming program started, following a visit by members of the M'Punga community to the Penhalonga area, where fish were already being produced for sale and for subsistence use (Lucas 1999: 19; and Marena 2000: MZ08). Afterwards a study was undertaken to evaluate its future potential. This study concluded that the lower zones of the rivers offered excellent potential for fish farming. As a result, a course backed by GTZ was organised, involving 31 members of the community. However, following the course only four were willing to initiate the proposed scheme (Marena 2000: MZ08).

These four people, organised in a group, started the work of opening the tanks utilising a mutual help system (Marena 2000: MZ08). The task of opening the tanks, in order to breed and rear fish, involves making ponds by digging and compacting the soil, creating two channels, one a passageway for water from the river, and the other for control of the water level of the tank. As early as the third day of the project, three people withdrew, arguing that the work was too hard. Manuel Seda, also a beekeeper, persevered creating his first tank over two months, which was 12 x 8 m wide (Marena 2000: MZ08). To stock his first tank, GTZ provided the first 200 fish free of charge as an initial stock (*ibid.*: MZ08). One month later, Manuel Seda decided to open the second tank, which was this time carried out in only eight days. To stock this tank, he took 410 fish from his existing fish stock in the first tank. In April 2000, Manuel Seda opened a third tank and stocked the tank from his by now, overpopulation of fish produced in the two first tanks (*ibid.*: MZ08).

In May 2000, a neighbour seeing Seda's tanks took an interest in them. After obtaining information on the best place to build his tank and other relevant information, he opened a fish tank, 10 x 10 m wide, within seven days. To stock the tank, he bought 200

fishes from Manuel Seda. In June, another neighbour also took an interest and after receiving the necessary instructions, together with his mother and sisters built a tank 10 x 4.5 m wide and stocked it with 80 fish also bought from Manuel Seda (Marena 2000: MZ08). Then another neighbour came along, continuing this process of disseminating the fish farming as an additional income-generating activity. According to the Marena team, another four people then displayed an interest and began the process of choosing an appropriate place along the rivers, then measuring out the tank space required (2000: MZ08).

Within the community a conflict of interest arose between the tank owners and farmers who used to cut the forest along the rivers in order to plant banana trees. The water from the rivers was the source of this conflict over natural resource use. The tank owners argued that deforestation along the rivers and around the river's source would reduce the quantity and continuity of the water flow (Interview António Serra, Liverpool, December 29, 2000). In other words, these income generation alternatives provoked some positive discussion within the community concerning how to find the best way to use a shared resource according to different stakeholders needs and interests.

These new options also motivated people to participate in other activities concerned with income generation and natural resource protection. For instance, most of the people involved in the beekeeping program were also participating in the community mobilisation program in order to control and minimise forest fires in the area, because they need to protect their beehives against fire in order to guarantee maximum honey production (Interview António Serra, Liverpool, December 29, 2000).

Manuel Seda has become a key member of the M'Punga community. He was one of the first ten volunteering for the vegetable production programme, carried out in collaboration with the agriculture extension network in Sussundenga district and he also

participated in the fire control programme (Marena 2000: MZ08). Manuel Seda is not only selling his products currently, but his success as a model of good practice represents a clear example of how income-generating activities can be more widely disseminated (*ibid.*: MZ08).

Some members of the community began to understand the need for CEF to protect their economic interests. During 2000, CEF began to see more people participating in programmes of natural resource conservation, namely fire control, soil and watershed protection, and more people became involved in beekeeping and fishing activities as an additional source of income (Serra 2000 *Research notes*).

The Sanguene primary school has also developed a programme for conservation. Teachers from the Sanguene primary school began to work with CEF in reforestation programs with student involvement (Serra 2000 *Research notes*). For instance, CEF provided technical assistance to establish a nursery where the students will produce seedlings. These seedlings will be used for the future school forest. According to the Director of the School, this is one way to encourage the interest of school students in nature conservation (in Serra 2000 *Research notes*). The students also planted some forest trees provided by CEF around the school.

5.3. Tanga community in Maputo Province

Because of the lack of means and difficulties in transport at the beginning of this CEF research project, a second community was chosen in the Licuáti Forest Reserve, in Maputo Province (Ribeiro 1999a *Research notes*; see also Ribeiro and Chavane 1995: 2; and 1996: 2). Since 1993, CEF has carried out an indigenous tree genetic conservation programme (see Alves, Massango and de Sousa 1997; Massango in CPR Digest October

1999: 10-11). There are two principal objectives in this programme. The first objective is to identify and select the best geographical areas for plant germplasm collection, such as seeds and other vegetative material, which could be multiplied at a later stage. The second aims to establish in the terrain the *in situ* and/or *ex situ* conservation areas, with priority being given to the establishment of seed collection areas. Scientifically and economically, the establishment in the country of *in situ* conservation and seed collection areas in the natural species habitats was seen as the most effective protection for both endangered species and species to be commercialised (see, for example, Swanson 1992: 4).

In 1995 and 1996, during the tree seed collections in Maputo province, CEF's tree seed collection team identified *Chanfuta* or Pod Mahogany (*Afzelia quanzensis*) seed sources in several forest areas. The team had also observed, in some areas, the scale of the *Chanfuta* habitat degradation and the extermination of the best individuals of this species in less than two years in an authentic exploitation without rules (Alves, Massango and de Sousa 1997: 2). After cutting all of the *Chanfuta* trees, many of the logs were left in the terrain because of their poor quality. Logs of the good quality were also seen left on the ground as a result of the lack of means for their skidding and transportation (*ibid.*: 2). This provides clear testimony either to the complete absence or a deficient presence of the state and the implementation of the law in those areas. Staff limitations and a lack of resources to enforce of the current laws of natural resource protection, has been responsible for these illegal activities.

After the first *Chanfuta* seed collection in 1995, one year later the seed collection team did not find standing those trees that had been previously selected and marked as being the mother trees for future seed collection (Alves, Massango and de Sousa 1997: 2). Some were seen cut down waiting to be transported away. *Chanfuta* has been extensively exploited because of its high timber quality, which is greatly appreciated in the market and

has a huge demand. From the 1960's onwards *Chanfuta* has been among the six most exploited tree species in Mozambique, and among the first four timber species with a recognised high market value, in demand from both the home and export markets (Ribeiro 1992: 38-39). In some places, particularly in the south of Mozambique, as occurred already in Swaziland, the number of the remaining *Chanfuta* trees can no longer ensure the production of seeds with the required genetic information, diversity and quality, to sustain a healthy reproducing population (Alves, Massango and de Sousa 1997: 1; Massango in CPR Digest October 1999: 10). Thus, six countries of the Southern Africa Development Community (SADC), namely Malawi, Mozambique, Swaziland, Tanzania, Zambia and Zimbabwe had selected *Chanfuta* as one of the priority species that have to be protected (see Zimbabwe Forestry Commission 1995).

In a study conducted by CEF and the SADC Tree Seed Centre Network Project, in April 1996, Tanga in the locality of Mudada, in Matutuíne district, Maputo province (see Figure 8), possessed the best *Chanfuta* stands (John 1996; Alves, Massango and de Sousa 1997: 2). After the initial contacts, the local community showed a good sense of forest conservation (Alves, Massango and de Sousa 1997: 28-32), and a widespread preservation of 'indigenous' knowledge among the community members (Ribeiro 1999a *Research notes*; and Massango in CPR Digest October 1999: 11; Massango and Martins 2000: 5). The Tanga community was also worried about illegal cuttings by outsiders, principally *carvoeiros* [charcoal producers] and *Chanfuta*-oriented loggers (Ribeiro and Chavane 1997: 3; Ribeiro, Massango and Chamba 1998: 2; Ribeiro 1999a, *Research notes*) particularly from the ninjas (Alves, Massango and de Sousa 1997: 15). The Ninjas, as they are known locally, are non-residents, strangers to the local community, whose activity is basically the production of firewood and charcoal (*ibid.*: 15, footnote no. 2).

5.3.1. Tanga: lands and people

Following the first contacts, in January 1997, some members of the Tanga community, including the chief, expressed an interest, albeit cautiously, in entering into a collaborative conservation programme with CEF (Ribeiro 1999a, *Research notes*; and Massango in CPR Digest October 1999: 11). As a woman from the Tanga community explained: "the trees are our only goods that we have" (in: Alves, Massango and de Sousa 1997: 22). The Tanga community display their knowledge that natural regeneration, following the felling of trees, will be not easy because their forest grows in a very sandy coastal plain (in Massango in CPR Digest October 1999: 11). There are some important ecological, cultural, social and economic factors that contributed to the decision to begin a collaborative project between the Tanga community and CEF (Ribeiro 1999a *Research notes*). These were as follows:

- Their understanding of the fragility of their forest,
- The possession of a local conservation wisdom,
- The existing local experience in managing natural resources,
- The presence of high species diversity,
- The conservation quality of *Chanfuta* trees and habitat,
- The state of poverty in which local people live, and
- A common interest to protect the forest (see Ribeiro 1999a, *Research notes*; and Massango in CPR Digest October 1999: 11).

The reasoning behind this willingness to have a common project is that the Tanga population had obviously an interest in the maintenance of its resource base because they depend on that and some of them are traditional healers, and thus they are the most important agents to control the resources that CEF was interested to protect. These

considerations led to an intervention strategy based on four assumptions (Ribeiro 1999a *Research notes*). First, the local community is small. Second the community was willing and able to manage and control the use of natural resources. Third a strong community organisation exists. Fourth, CEF intervention could facilitate a natural resource management and development project in the area through its links with the central government and donor community.

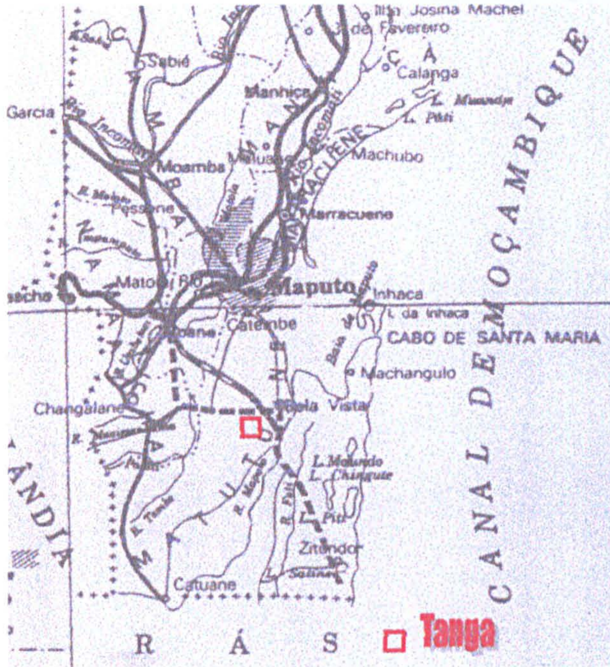

Figure 8. Tanga geographical location

Tanga is a small forest community in south of the capital of Mozambique, just on the other side of Maputo Bay, in a complete state of deprivation, in the peripheries and isolated from the outside world. Map source: Map of Maputo Province, Direcção Nacional de Geografia e Cadastro, Maputo, 1988.

Tanga is located within the broad geographic limits of latitude 26° 22' and 26° 29' S, and longitude 32° 28' and 32° 35' E, covering an area of 10,000 ha, see Figure 8, inland from the coast. Tanga forest, a 'sand forest', is part of the Licuáti forest ecosystem, which was designated the status of forest reserve for supplying timber to the Portuguese State (in Gomes e Sousa 1968: 15; and Alfaro Cardoso 1969: 13). This forest reserve was created in 1943 by Portaria no. 5,534 of December 11. The boundaries of the forest reserve were never properly defined generally being considered as located between the rivers Tembe and Maputo, and between the roads from Changalane to Bela Vista and from Bela Vista to Catuane, see Figure 8, (Gomes e Sousa 1968: 15). Later, the Portuguese government in Mozambique began to give concessions for

areas of commercial agriculture and production of cattle in the Licuáti (Gomes e Sousa 1968: 15) thus alienating the forest reserve for other users.

It is important to emphasise, as argued by Gomes e Sousa, that in the forest reserves, logging was banned (1968: 5; see also *Governo-Geral de Moçambique* 1965: §29). However, in 1967 only about 19,100 ha of the Licuáti forest was considered as a free area for the 'forest' reserve (Gomes e Sousa 1968: 15). However, the forest was practically deprived of the best tree exemplars, as a result of the previous logging there remained only the non exploitable trees, old and young individuals, in the ground (*ibid.*: 15). Ribeiro has argued that logging for the wood industry must be prohibited in Maputo province and the forest of Licuáti must be protected (1992: 89). Not long ago, it was an impenetrable semi-deciduous forest (see Wild and Grandvaux Barbosa 1967). Licuáti, which is likely to be a small relic left from the destruction of the previous forest (Ribeiro 1992: 89), is nowadays the last forest ecosystem in the south of the country with considerable social, economic and ecological importance. It is one of the few or perhaps even the last unique closed canopy sand forest with the best genetic material of *Chanfuta* in the region of Matutuíne (Ribeiro, Massango and Chamba 1998: 2) supporting a considerable diversity of tree species (Chamba 1996).

In 1996, CEF conducted several surveys, visits and contacts with local community members in order to establish relationships (Ribeiro and Chavane 1997: 3) and "to build a trust between CEF' staff and members of the community, exchange knowledge, and to learn their wants, needs and priorities" (Ribeiro, Massango and Chamba 1998: 2). A participatory rural appraisal was undertaken by CEF to identify the local wants and needs, problems and priorities of the selected community (Alves, Massango and de Sousa 1997). Sixteen families were informally interviewed, in order to provide information concerning the status of the local community and its institutions, traditional practices in the use of

natural resources and the possible ways that community involvement could be undertaken to establish the *Chanfuta* conservation area (*ibid.*: 10).

Almost all members of the Tanga community are originally from the area and marriages are primarily with people from neighbouring communities, particularly from Salamanga and Mudada (Alves, Massango and de Sousa 1997: 15). During the war, many local people sought protection in South Africa and Swaziland, and they only began to return in 1994 (*ibid.*: 15). In practice, this community was still in the process of settlement. People were still returning, building their houses and opening up their farms (*ibid.*: 15). The sowing had been undertaken with only a small stock of seed and with a low percentage of germination, because of inappropriate seed conservation (*ibid.*: 15). There was no social infrastructure such as a school, health centre or market (*ibid.*: 16). The local traditional leader, Funda Tembe, still continued to reside in South Africa, and many of the relatives of the local population still had not returned home (*ibid.*: 15). They had not received any benefits from local government (Ribeiro 1999a *Research notes*). They had not received any support for the repatriation of refugees. For example, they had problems to cross back across the border with their cattle and other belongings because they lacked legal documents (Alves, Massango and de Sousa 1997: 15). They were completely abandoned by the government, becoming pioneers anew in their home country.

As a strategic approach, in January 1997, the research team decided to establish regular contacts with both formal and traditional institutions, and to encourage local government institutions and NGO(s) which were operating in the area, to collaborate with the community (Ribeiro 1999 *Research notes*; see also Massango in CPR Digest October 1999: 10). A planning workshop with members of the community and other stakeholders operating in Matutuíne district was carried out to clearly identify development goals, project objectives and project outcomes (CEF 1997). The primary idea of the Tanga

research and development project, as described by Henrique Massango, was "to improve the living standards of the Tanga community, through a more sustainable use of local natural resources and to reduce the degradation of the *Chanfuta* ecosystem in Tanga through the local community's participation" (in CPR Digest October 1999: 10)

One of the aims of this action research project was to assist the local community to develop their own institutional arrangements to manage their resources on a sustainable basis in order to derive a better income from non-wood forest products (Ribeiro 1999a *Research notes*; Massango 1998; and 1999). For instance, Carlos Bento identified 85 species of birds (1998) and Henrique Massango identified 65 plant species of multiple-use namely for food, medicine and construction (1999). This existing biodiversity results from diverse types of forest, grassland, and wetland habitats that occur naturally in the Tanga area. Henrique Massango, the project's field manager for CEF, quoting work done by Esperança Chamba and Carlos Bento, has argued that Tanga constitutes one of the few forest patches which has a significant diversity of forest species that serve as a niche for many bird species (1999a: 4). All of these particularities lead to the idea of developing tourism activities in Tanga.

The Tanga lodge project, funded by the Ford Foundation, was the first community initiative in Matutuíne directed at improving living standards of the community through ecotourism activities (Ribeiro, Massango, and Chamba 1998: 1). In July 1998, during the first Community Exchange Workshop between Matutuíne and Maputaland, Tanga community in their own presentation on the second day of the workshop, manifested a strong interest in ecotourism activities as an economic alternative to reduce the pressure on their forest resource. Bringing tourism activities also meant new partners for the protection of the forest. CEF was also interested to protect the same forest and to create an *in-situ* conservation area in Tanga in order to maintain the existing *Chanfuta* habitat as the main

source of genetic material. Tanga community in close collaboration with CEF prepared a project document to build a lodge as an alternative source of income that could reduce the pressure on natural resources (*ibid.*: 3). Although the community would be the owner of the lodge, the grant was given to CEF on behalf of Tanga community and CEF's role was be responsible for:

- Assisting the community in obtaining the land and the forest rights, and in establishing the legal mechanisms and management competency for the community to become the real owner of the lodge installations,
- Assisting the community in all stages of the project and construction of the lodge,
- Supporting community capacity building on ecotourism and natural resource management, as well as on lodge management, and helping the community to monitor and benefits from consultant's work on the lodge and ecotourism tender process, and
- There will be a joint management committee with members of the Tanga community council and CEF staff, with regular meetings to validate all of the activities and arrangements (Ribeiro, Massango, and Chamba 1998: 5).

Amós Tembe, uncle of the traditional leader, is currently the chief of the Tanga, a small forest community. He estimated there were 62 families living in Tanga (Alves, Massango and de Sousa 1997: 15; Ribeiro 1999a *Research notes*). The majority of the Tanga population belongs to the Ronga people, particularly to the Tembe group (Massango 2000: 11). Catembe, south of Maputo just on the other side of Maputo Bay, in the Matutuíne district where Tanga is located, means '*a casa dos Tembes*' [the Tembes' home]. In the past, the Tembes' domain, almost all of Matutuíne district (Figure 8), extended from Catembe to Ponta do Ouro, located in the southern border with KwaZulu Natal, South Africa, and the coast (Amós Tembe to *Savana*, February 12th, 1999).

The families, and some of the key people from the community, are located strategically around the Tanga area in order to protect the forest limits, and in certain places to preserve their natural resources, specifically the water of the small lakes, pools and waterholes, from outsiders, particularly from ninjas (Interview Amós Tembe, Tanga, July 18th, 1998). The ninjas established themselves in the neighbouring areas of the Tanga forest before the original inhabitants had returned from exile. Thus, 23 families are located in the forest patches of Nfwecani and Ndzivanini, 17 in Weleweli, 12 in Nkombo, 8 in Kuhunu and 2 in Hlantfweni (in Alves, Massango and de Sousa 1997: 15). Although the presence of the ninjas had not yet affected the Tanga area, this populational distribution in the area may explain this strategy to locate the houses around the limits of the forest and in key points of their natural resources in order to protect the forest (Massango 2000: 11).

5.3.2. The hierarchy of Tanga's leadership and its community role

The hierarchy of Tanga's leadership is slightly different to the M'Punga case. The acknowledged traditional leader is absent, and it is his uncle, Amós Tembe, locally known as 'Mambadjela', who has been the Chief of the Tanga community and who has himself introduced the present hierarchy in Tanga' leadership (in Alves, Massango and de Sousa 1997: 17). As in M'Punga, the Chief has to preserve both the social harmony of the community and the natural resources of the area. In order to support Amós Tembe in the fulfilment of his duties as a Chief of this small forest community, he has appointed three counsellors to assist him, as well as to assist any other Hinduna on any subject, but especially in the resolution of social conflict. The three counsellors are the Chief's son, the Hinduna James Tembe, the Hinduna Chief Xigomisso Kikhombo, and the Hinduna Judas Mathe (*ibid.*: 17). Under him is the Hinduna Chief who has been a woman, Xigomisso

Kikhombo. She is the chief of all Hindunas, *Chefes de Terra*, equivalent to a Chief of the village, or to a *Saguta* in the M'Punga's leadership hierarchy. However, in the case of Tanga, they are more directed and located to protect in fact the patches of the Tanga forest allocated to them (Table 5), in an authentic conservation duty. Hindunas are the Chief's arms and represent also the link between the Chief and members of the community in their forest areas.

Table 5. *Hindunas* and their forest patches

***Hinduna*'s name**	**Forest patch**
Xigomisso Kikhombo	Kuhunu
Judas Mathe	Nfwecani Ndzivanini
Denis Tembe	Lifwanfweni Wake Tcham
James Zinguego Tembe	Nkombo
Djuvani Tembe	Hlodvwani Guinguinini Weleweli
Jorge Ndlati	Manguleni Hlantfweni Likuati

From: Alves, Massango and de Sousa (1997: 18)

Although the Tanga area is parcelled into five main zones namely Tanga, Hokosa, Becuti or Kambuti, Nkanine and Nkovane, the six existing Hindunas, each one with a group of auxiliaries, are direct guardians of the forest and have to control any forest activity in their areas, judging land allocation and the use of the natural resources (in Alves, Massango and de Sousa 1997: 18). Hindunas have also to secure social harmony in their micro areas. The Hinduna's role in promoting social harmony is principally exercised in the resolution of local conflicts when the various social components are unable to reach any consensus. Normally, the Hinduna appoint first an auxiliary to be the mediator. Only in the case of an Hinduna being unable to solve the problem does he/she then transfer the problem to the Chief who takes the final decision (*ibid.*: 18). Every Wednesday, Chief Amós Tembe meets with his people and, when necessary he acts as a judge, taking the ultimate decisions on any social conflicts (Ribeiro 1999a *Research notes*).

At the time that the research was undertaken, there was no evidence of any land conflict between members of the community, however, the 'first come first served' local policy may generate future land conflicts among community members, given that some families are occupying land that previously belonged to others who have not yet returned (Alves, Massango and de Sousa 1997: 19). At the time of the research, the most common problems were adultery and witchcraft (*ibid.*: 18). The land conflicts that exist at the local level are related to the dispute of limits in the south of Tanga with the Santaca chieftaincy, and the land which was given by the government to the private sector (*ibid.*: 18). The serious conflicts that exist are precisely with the outsiders over the use of their natural resources and we turn next to analyse these conflicts.

5.3.3. Natural resource use conflicts

During the year 1998, trucks with *Chanfuta* logs began to be seen on the road between Bela Vista, capital of the District of Matutuíne, and Catembe, and on the ferryboat between Catembe and Maputo (oral reports from the research team members in Ribeiro 1999a *Research notes*). This timber was supposed to come from the Licuáti Forest Reserve, located in Matutuíne district, where good exemplars of trees of this species could yet be found. Some actions were taken to stop this logging. Endeavours to convince the district and provincial authorities to take action over the illegal cutting were made by the research team with two main arguments. First was the need for the protection of both the habitat and the *Chanfuta* as this was one of the endangered tree species in the south of the country, which was one of the reasons why CEF was working in partnership with Tanga community. Second was the legal aspect of the commercial logging in the Licuáti forest reserve, which was prohibited as in any forest reserve. However, trucks with *Chanfuta* logs

continued to be seen along the same route, avoiding the alternative route because of the existing forest control in Boane town, another access route to Maputo City. At the end of December 1998, Amós Tembe, Chief of the Tanga community requested a meeting with the Director of CEF and the donor representative.

The following section is based on the *research notes* covering the meeting between the Chief, Amós Tembe, and the author on January 27th, 1999, in the Tanga chief's home (Ribeiro 1999a *Research notes*). The meeting with the donor representative occurred on February 1st, 1999, and later the donor representative wrote a letter to the Vice-Minister of Agriculture and Fisheries denouncing the illegal logging (personal communication of Ken Wilson, in Ribeiro 1999a *Research notes*). The problematic issues raised in those meetings were also published later by the weekly newspaper *Savana*, on February 12th, 1999, in pages four and five, following the author's invitation to a team of journalists to see what had been happening in Matutuíne, particularly in Tanga. Fernando Manuel, the journalist who wrote the article give this title: *Onde há bolo há moscas* [Where there is a cake there are flies].

In that meeting with the author, Amós Tembe started to say: "In any marriage both parts bring something. In the case of CEF and Tanga community both parts have to bring something if CEF wants really to marry with Tanga people" (in Ribeiro 1999a *Research notes*). Then he accused the *Régulo* Carmona Santaca of a neighboring community of being the one responsible for ordering illegal loggers to cut *Chanfuta* trees in the Tanga forest. Amós Tembe argued that this logging had to have some kind of protection from someone in the district or provincial government, as the use of armed people to intimidate local people was often practiced. He supposed that those armed people were members of the police using civilian clothes. In addition to that he confessed that his own son, selected and trained as a forest guard by CEF, was also involved in this illegal operation. He

suspected also that CEF was trying on the one hand to give sweet honey but on another hand to take away the best of their forest and the freedom of his people. Then he told the author a traditional story. "The elephant lives in the forest. The crocodile lives in the rivers. When the river is dry the crocodile can survive in the forest. But when the forest is destroyed by fire, the elephant never goes to the river to find a place to survive or to find food". And Amós Tembe finished thus: "Land is all of what we have" (in Ribeiro 1999a *Research notes*).

Chama-se Amós Tembe, tem 93 anos de idade e a frescura de pensamento, argúcia e energia de um homem na flor da vida. E convicções pessoais firmes, firmeza de atitudes: "eles que digam o que quiserem: aqui em Tanga, o régulo sou eu. E sou eu que decido sobre as grandes questões da vida dos meus".

Figure 9. "Here in Tanga, I am the *Régulo*".

Amós Tembe to *Savana*, Mozambique weekly paper: "Here in Tanga, I am the *Régulo*. And I am who decides on the important matters of the life of my people". In: *Savana* February 12th, 1999, p. 4

It is noteworthy here to mention that Amós Tembe, Chief of Tanga who was 93 years old in 1999, was an energetic, respectful and charismatic leader and protector of his people, see Figure 9. He died in April 2001 (Massango, e-mail April 24th, 2001). Once, referring to outsiders that used to come with different agendas for the community, he said the following: "they can say everything what they want: here in Tanga, I am the *Régulo*. And I am who decides on the important matters of the life of my people" (*Savana*, February 12, 1999).

Amós Tembe recognised also that alone he could not stop these activities and requested the author to act on the community's behalf at the highest levels of the government, to stop this illegal logging in Tanga forest. The author and his research team were unable to solve the problem. They thought that perhaps with the pressure from the donor community and/or with one investigative article in an independent newspaper, this

would call the attention of civil society and governmental authorities to the facts described above (Ribeiro 1999a *Research notes*).

5.3.4. The reality of conflict resolution

In March 1999, the author, who then was in Liverpool, was dismissed from his post as the Director of CEF, and any support for this thesis and for the research project was denied thereafter[3]. The new Director of CEF used the funds for this research in a different direction from the original plan, to the detriment of the main beneficiaries (Pedro Mangue, e-mail July 7th, 2000). Not only were the funds of this research project utilised for other ends different from the original idea, but also the funds for the Tanga lodge were not spent for the benefit of the local community (Henrique Massango, e-mail April 10th, 2001).

Nearly two years after the change of Directors in CEF, on February 16th, 2001, *Savana* wrote a long article with the following title: *Direcção Nacional de Florestas: Incompetência, corrupção e má administração* [National Directorate of Forests: Incompetence, corruption and bad administration]. In this article *Savana* referring to DNFFB argued that the origin of this sarcasm in the headline referred to the marginalisation of competent staff. The National Director of DNFFB discarded the few qualified staff, which seriously affected CEF's normal work. It undermined the new policy directives as discussed in chapter four. There were seemingly two principal motivations for the new Director to make these changes. The first was racially motivated to remove white

[3] Arlito Cuco, the newly appointed National Director for the DNFFB, corroborated this by his e-mail of June 16th, 2000 in response to the author's urgent request for a continuation of the Ford Foundation grant to complete this doctoral thesis. He wrote: "*Ribeiro, assim estamos 'quites'....*" [Ribeiro, now we are quits....] (Arlito Cuco, e-mail June 16th, 2000). But he did not explain what this meant.

and mixed race professional staff and the second was an opposition to genuinely decentralised and participatory initiatives (see *Savana* February 16th, 2001)[4].

In the next chapter will explore the lessons that we can be derived from the two case studies and from the literature and experience in southern Africa and in Mozambique.

[4] An example of this given by *Savana* was the firing of the Director of CEF, an experienced person, to be replaced by an inexperienced 'engineer' who was not accepted by the administrative and researcher staff and workers (in *Savana* February 16th, 2001).

Chapter Six

Lessons from the literature and experience

"Poverty is one of the prime forces eroding biodiversity in Africa. Development can be a potent force in conservation, provided that the economic growth improves the well-being of all members of society" (Biodiversity Support Program 1993: xiv).

In general terms, the two case studies, M'Punga and Tanga, indicate that local communities have indeed a great capacity to adapt to the new socio-political context and to protect their lands in order to use them for their survival. In this chapter we will explore the lessons derived from the two case studies and from the literature and experience in southern Africa and in Mozambique. This chapter pays particularly attention to the need of social cohesion and how important it is to build trust among the different stakeholders to have a collective action in achieving sustainable management of natural resources and in attending to people's priorities. In the first section we explore the existing local debate, then the politics of the local debate is examined in the next section. In the following two sections we will analyse the role of local institutions particularly of the traditional leaders and of the new committees for natural resource management. The last section of this chapter we explore the people's priorities for the process of development.

6.1. Local debate

In M'Punga, there was a local debate about the legitimacy of the *Mambo*. Aspects related to traditional succession, his inability to reconcile and represent the community's interests constituted a source of litigious debate in his community. The *Régulo* M'Punga has the 'formal' authority given by Renamo during the war. According to the local traditional succession system, he is not the legitimate successor to the *Mambo*. The conflicts occurred with the *Régulo*'s inability to solve the elephant problem by conducting a traditional ceremony. This was interpreted by some residents as denoting that he was no longer recognised by the spirits and consequently by his people. He had no traditional back-up and some members of the community challenged his authority. The *Régulo* was

also charged with accepting bribes from the CEF project and was suspected of being more preoccupied with his own personal welfare rather than that of the whole community. This was demonstrated by the conflict created with the installation of the grinding mill in M'Punga. Nevertheless, he tried to gain authority within the community, for example with the extension of the *Mambo*'s area, and obtaining formal authority from the government to which he tried to become allied.

However, the M'Punga community debate is not only about who should be the representative of the community's interests; it is also, and fundamentally about the broader relationship between the local community and outsiders, particularly the state, which is not part of their traditional culture. After the destruction of their original states such as the Gaza Empire, the introduction of the so-called modern state model introduced profound changes to the way that people lived. The anxiety raised in M'Punga was linked to a complex milieu of distrust between community and government, community and chief, and chief and government. The same sentiment of distrust between community and government also lay at the heart of the debate among Tanga community members. This seemed to be a common constraint impeding community members from participating willingly in CBNRM initiatives. This distrust was based on many different events and socio-political factors from both the past and the present.

6.2. Politics of the local debate

Traditional authorities have experienced different political challenges over time. They were utilised and manipulated by the colonial government, removed after independence by Frelimo, re-established by Renamo during the civil war, and recently recognised formally by the Frelimo government for their role in local communities.

Currently, the issue of traditional authority is closely bound up with the political confrontation between Frelimo, the ruling party, and Renamo, the opposition party (see West and Kloeck-Jenson 1999: 445). Both political parties are competing for the support of the traditional authorities in order to build up their political influence and control over the people. Moreover, there are promises and expectations never accomplished by both parties or even by any other outsider, which has contributed to community frustration and distrust. These circumstances have contributed to creating suspicion concerning the real purpose of government institutions in promoting community participation in natural resource management.

The strong influence of Renamo in M'Punga is due to Renamo re-imposing the traditional leadership in many areas of Sussundenga district. In the areas under Renamo control during and after the war, Renamo had made use of the traditional authorities' influence in their communities to fight and resist any government action or programmes. As analysed in the M'Punga case study, the relationship between the local chief and CEF was initially very difficult. This attitude was a reflexion of the resistance to all initiatives from any governmental institutions. The resistance of the chief was also a reflection of community perceptions. CEF was seen by locals as an attempt by Frelimo to gain influence and the sympathy of local people. Government staff was seen as being members of Frelimo rather than as civil servants, and government institutions were seen as branches of Frelimo.

The past wisdom of the 'fortress' conservation policy, land expropriation and rejection of all traditional systems concerned with natural resources management and decision making, the post-independence policy of *grupos dinamizadores* [Frelimo local committee] and *aldeias comunais* [communal villages], was a powerful and negative experience remaining in the people's memory, and all of these factors contributed to exacerbate a prevailing climate of distrust. The committee created in M'Punga as part of

project implementation was perceived once again as being a Frelimo strategy and part of the government's struggle to reinstall the contentious local politic-administrative institutions created immediately after independence, the *grupos dinamizadores*, and *aldeias comunais*.

In M'Punga, people were suspicious of CEF, that they were also endeavouring to re-impose the forest guard system, whose role was seen as restricting the access to natural resources, to reinforce the law and punish the local people for any infringements as in the old days of colonialism. They knew as well that in certain parts of Manica Province some outsiders, profering government credentials, such as land licenses, were expropriating land from local people, displacing them. Little or no attention had been given to the displaced people. They were thrown off their land without any compensation and were left to survive on unsuitable land.

During the colonial and post-independence period, the local community was excluded from resource management. Today, local people find a dilemma in understanding why outsiders are now demanding that they participate actively on decision-making over natural resources. There is an understandable suspicion amongst some of the local communities targeted to become involved in CBNRM initiatives. Their key concerns are how will such schemes affect their lives, what guaranteed benefits will ensue and to what extent will they have control over the delivery of the benefits.

6.3. Traditional leaders: acceptance or rejection?

The case studies also show that it is the traditional institutions that in practice govern and manage the human and natural resources at the local level. Although the traditional leadership has no democratic mandate in the sense of people participating in the

selection of their chief, in most of the rural areas in Mozambique, traditional leaders still have influence. However, the local leadership is not always accepted and neither does the leader always represent local people's interests. In M'Punga and Tanga communities, their traditional leaders represented the personalised symbol of local institutions with authority. They have to ensure both social harmony and control over the use of natural resources through the application of customary rules. But, the traditional institutions and rural communities have changed throughout the history of Mozambique's pre-colonial, colonial, post-independence, civil war and post-civil war periods affecting negatively their capacity to both regulate people's behaviour and control natural resource use.

Despite all changes of the past and present being politicised, the traditional institutions are acknowledged as being indispensable for promoting sustainable use of the natural resources in the country. There is an increasing acceptance of the need to work with the traditional authorities for natural resource management, development and other social programmes. However, inconsistency remains in the process of recognition of who is or has to be recognised as the legitimate Chief or, in other words, who is the authentic representative of the local communities. In the case of Tanga community, for example, the traditional leader demonstrated a greater sense of responsibility in governing people and managing the local resources through traditional mechanisms in a way that could secure communal use and ensure a balanced sharing o benefits. The Tanga community members *de facto* respected the Chief. In the case of M'Punga, the authority of the traditional leader had been questioned by local people for various reasons. It seems evident that the approval by local people of their traditional leaders and rules is crucial to secure a sustainable natural resource use regime. The government recognition of the existing traditional societies and people's aspirations is the first step forward, not only for poverty alleviation, but also for the creation of people's wealth on a sustainable basis.

The government and Frelimo in order to extend effectively their administrative and political predominance are trying to make use of traditional leaders to mobilise local communities for different political, social, economic and ecological programmes, including tax collection. The latter means a direct and legal economic benefit for local chiefs making them merely government employees. Note that this economic benefit for local chiefs becomes higher the more they receive from the community's tributes.

6.4. Traditional institutions versus new committees

These traditional institutions are effectively social dispute-resolution mechanisms over natural resources and other social conflicts within the community. The traditional institutions have a holistic function and are not exclusive to a given domain such as Forestry and Wildlife, but rather they operate as managing the diverse and interrelated sectors of the community and their surroundings. Although some specialisation exists at the level of economic activities (see Figure 10. M'Punga traditional tools), the world around them is not divided into departments or disciplines. The world is both unique and indivisible, and is where the people have to live in strict conformity with environment rules. If someone is killed during a thunderstorm by lightning in Tanga, this is conceived by the local people as a lightning punishment from the ancestors as they had severely violated the social or natural laws (Field guide A, Tanga, October 15th, 1998).

According to Decree Law 15/2000, which recognised the traditional leaders and established legal mechanisms for collaboration between local leaders and the state, the traditional leaders will have the responsibility for mobilising the community for government programmes, managing natural resources, promoting local development, resolving local conflicts, and tax collection. This means that, formally, to these traditional

leaders was also given a holistic responsibility, they have to deal with inter-related social, economic and ecological issues at the local level.

Figure 10. M'Punga traditional tools
Photo taken in January 15th, 1998.

The request by law for the creation of new community committees is contributing to weakening the capacity of traditional institutions to re-enforce rules concerning natural resource use. Outsiders view community committees as a way to solve or minimise local conflicts and to address the 'vacuum' of the authority created between traditional and state authorities. The strategy of community involvement adopted by many CBNRM project staff has ironically continued to contribute to weakening the local capacity to control use of the natural resources. The top-down approach in implementing CBNRM projects and the creation of such new community committees has also failed to empower the local community.

The choice of community representatives to comprise the committees was based on different criteria and was manipulated by project staff. The most common way of electing the representatives for the committee was through a community meeting convened by the project. The members of committees were elected by and from those who attended that specific meeting. In all of the cases, the CBNRM project staff had some kind of formula to fill specific committee with the numbers of people, based on gender equity and in some cases with definitions of who must be in or who should excluded. For instance, Eduardo Mansur and Isilda Nhantumbo have reported that, in same cases, the project staff advised the exclusion of people who had a local political post (1999: 7). This prescriptive format for creating the committee resonated with the past experience of the community, not only affecting the credibility of such committees and consequently of the project, but also of the government in a wider sense.

6.5. People's priorities

Both case studies indicate that the people's priorities are essentially to protect their lands and obtain the communal land title, to have in place a functioning health centre, a school and established market mechanisms. Their lands signify for them their daily survival, and the requested health centre means being able to survive by combating diseases and to allow their children to grow up healthy. In M'Punga and Tanga, the land is not only essential for their daily survival but also represents the capital at hand for the development of their livelihoods. In M'Punga, for instance, the forest land means new *machambas* for the cultivation of banana, a cash crop with guaranteed cash returns. In Tanga, people struggle to keep the land covered with the original forest for the production of medicinal plants and now, perhaps, for ecotourism activities as are occurring in

neighbouring South Africa. The school represents the future and the aspirations of the community for a better life, and the market is the only existing mechanism for them to engage in and secure a better livelihood.

Particular attention has to be given to market forces. The market can promote a better livelihood but also may contribute to an unsustainable use of natural resource such as the production of charcoal and firewood around Tanga and banana in M'Punga, to supply the vast market of Maputo. The high demand of those products or others and the lack of more value income-generating alternatives may galvanise the practice of unsustainable exploitation of the natural resources in exchange for a short-term and precarious livelihood.

CBNRM initiatives were readily accepted by many academics, government and donor officials, and politicians as a means to ensure the conservation of the country's environment and alleviation of the people's poverty. As Norman Uphoff has argued, there are two main reasons why this should have been accepted: "One relates to the objectives of conservation and the other to development" (1998: 4). The first reason, related to the protection of biodiversity, is that maintaining the integrity and viability of particular ecosystems we will be able to have development payoffs, however, these are more likely to be in the long run than in the short term. Nevertheless, if this is linked with economic activities such as ecotourism, which is increasingly common in southern Africa, there are greater chances for short-term incentives and benefits attached to the conservation of the environment to be realised (*ibid.*: 4). The second reason, related to development, is that the maintenance of the natural ecosystems because they provide multiple services and resources can support development plans for local communities, regions, nations, and the world. These ecosystems have explicit economic value, but unfortunately these do not

always match the costs to those local communities whose cooperation is essential to preserve those resources (*ibid.*: 4-5).

Local people also want development, however, they have their own vision of progress, which is frequently different from that of the outsiders' development model, and local people are well aware of their social deprivation, and economic, technological and professional constraints. Local people should be free and legally entitled to take actions indispensable to the preservation of human, animal and plant life when this is relevant to the conservation of exhaustible natural resources, and be able to adopt their own measures to apply both to the consumption and to the production of assets in order to achieve sustainable livelihoods. Social capital and collective action, as argued by Bart Pijnenburg, "are important heuristic concepts when talking about community based natural resource management. Social capital refers to collaboration and trust that are basic ingredients to collective action. Collective action is necessary to come to an agreement on the use of natural resources" (1999: 7). Only when users of the natural resources agree on the use and control and when these rules can be enforced can non-sustainable use be avoided (*ibid.*: 7).

Communities from Matutuíne in Mozambique and Maputaland in South Africa have a common experience that the potential benefits from regional development initiatives will only be secured if their community institutions are legally recognised and they own the title of their land and natural resources as an inalienable right (Anon 1998: 2). Progress for people living in rural areas must be grounded upon wording opportunities to manage the natural resources in a way that benefits themselves (Chigoya 1999: 2). Progress is used here with the meaning of a self-reliant and gradual move towards a better social and economic state of living, to differentiate it from development that is normally understood in the literature as economic growth. Such development has been regarded as the universal path to eradicate poverty and is frequently imposed in different ways on to the poor.

Already in 1964, Homero Ferrinho argued that a sound theory on people's development should be based on people's knowledge and experience, their social and cultural milieu, the economic and technology level of the local community to which 'development' is directed, to better understand and discern the causes of non-development (1964: 13). A timely and honest dialogue to share knowledge, experience and vision, and a genuine, effective and on-going communication between the community, private sector, and non-governmental and governmental agencies on regular basis are a key ingredient of a successful development programme (Anon 1998: 3). Governments should continuously notify local people, not just their leaders, of the intentions of regional development plans and the role and opportunities for communities within this scheme (*ibid.*: 3). Non-governmental organisations can play an important role in maintaining the dialogue and cooperation, and supporting networks of communities and other stakeholders (*ibid.*: 3).

The two case studies suggest that what local people want is to priotitise the improvement of their livelihoods on a sustainable basis and this has to be undertaken in an environment of trust and social cohesion among all of the stakeholders. However, to deliver sustainable human well-being to local communities and to ensure the biodiversity conservation, new approaches are required in order to genuinely empower local people and to enable them to engage freely in development and conservation efforts which are undertaken by the Government of Mozambique. We turn next to consider the need for community livelihood approaches.

Chapter Seven

Community conservation versus community livelihood approaches

"Both the target group and the development agents have the task of analysing and minimising the constraints and vulnerabilities and maximising the opportunities and the capacities at the individual and community level to respond to these opportunities in the most effective way possible (Ong and Munslow 1999: 112).

Throughout this thesis the author has been arguing that there is a need for new and more innovative approaches for the conservation of the environment. Conservation is essentially to meet people's needs. It implies that the environment, where we live, and development, what we do to better our sustenance, cannot be disassociated from people. Ultimately, it is people who manage their surrounding environment in order to improve their livelihoods and it is they who create the social sphere within which they live. However, history shows that the development process pursued by humanity has produced powerful groups who have been manipulating, influencing and controlling others, and we turn to consider this dimension in the first section of this chapter. The disillusionment with community conservation practices will be analysed in the second section. In a following section we examine the viability of local development on a sustainable basis by local communities. We turn to consider community livelihood approaches as an alternative to achieving sustainable economic development in the final section of this thesis.

7.1. Manipulating people's expectations

The social world created, based on oppression and exploitation, is in a constant state of conflict, tension and contradictions. People, however, have the experience to resolve their problems and the capacity to understand, to adjust and to create their own destiny, but they are 'enslaved' by social factors and conditions which make it difficult for them to change easily this social reality. The orthodox development approach, which created both prosperity and poverty, has been creating not only the environment crisis but also an ever growing number of poor people in the world. These two consequences in turn interact and create a further downward spiral as identified by WCED (1987: 27). The

environmental problems are not always immediately visible, they start slowly but have far reaching effects on people and lands. There are limited natural resources that can continue to support today's levels of prosperity and poverty, risking the potential for long-term economic development. Natural resources are scarce and the continuing deterioration of the environment may make unrealisable many future development goals.

Precisely because the present development practice is not sustainable, a 'sustainable' approach to development has been evoked in order to discover new approaches to maximise human welfare and maintaining the environment for future generations. The key point within the new approach is that the environment crisis should not be taken in isolation and a bottom-up approach to development is required in order to satisfy the people's needs: community-based conservation.

Because of the high costs of maintaining 'fortress' conservation to protect the environment, many governments and donor agencies embarked on initiatives involving local people in conservation management in exchange for sharing benefits to meet local people's needs. Over the past two decades, community-based initiatives have been spreading to many countries. In the practical implementation of this new approach, community-based conservation projects have generally been imposed onto local communities by people not aware of the pressing problems local people face and with a very different background to that of the local communities involved, imposing their own external values. The local community participation component was often only developed after the project had been approved. Thus, all too often community conservation became another top-down approach with the project objectives foreign to the community. Conservation policy and practice of this kind is not the priority for local communities.

In practice, the people's participation approach has been used and manipulated mainly to achieve conservation goals instead of enabling local people to fulfil their own

priorities and needs. Local people provide cheap labour for conservation programmes. They still do not have proprietorship rights over their lands. Local people continue to be unable to shape the direction, content and process of their development. This has created a tension between outsider-defined environment problems, and locally defined problems and solutions, as a result of the different agendas. Moreover, some of the conservation agencies have used the conception of people's participation as a model to secure funds from donors to strengthen their own agencies and to ensure the accomplishment of conservation objectives, which they judge be the best for the country. This institutional self-interest may carry the risk of thwarting and deceiving local people's expectations concerning implementing any one particular CBNRM project. Such endeavours will delay the poverty alleviation process, frustrating any government policy efforts in this direction.

All of the above lead to a lack of trust between different stakeholders, contributing to a lack of social cohesion in society. Only quite recently has it been recognised that social cohesion, social capital, is crucial for poverty alleviation and sustainable development. Trust is one of the key resources to build social capital, and to encourage people to accept and manage change. This should be seen as the first step to enhance community participation in building community conservation programmes, in order to ensure genuine people's participation in the management of natural resources and to link conservation goals to the local development of well being. This also will allow the link to be established between local and national level spheres of development in a country.

There is no doubt that community conservation is the opposite of 'fortress' conservation. However, people have not yet been placed at the centre of integrated resource management, hence have not yet benefited from this approach. To place people as the main focus would engage a new set of development priorities and require responsibilities being allocated to, and assumed by, local governments and communities

for conservation. In order to enable such development, governments should endeavour to develop the social and human capital to consolidate social cohesion and evolve a rational resource use management practice.

With the growth of the community conservation approach, and observing how it has been implemented in Mozambique, a core dilemma was identified. Is the primary concern people or the wilderness, development or conservation? Addressing this dilemma has been a core concern of this doctoral research work. What people demand may be the reverse of community-based conservation. It is likely to have the development of their livelihoods as the principal objective, and conservation and resource management as an approach to further the aims of sustainability. This thesis has endeavoured to interrogate the various sustainable development pathways put forward as the way to alleviate poverty, facilitate economic growth within the local community, and ensure conservation of the country's biodiversity.

This thesis has examined the experience to date of such a poverty alleviation policy objective amongst neighbouring states in Southern Africa and then within Mozambique itself, exploring the lessons to be learnt and addressing questions concerning the applicability in Mozambique of community-based conservation practices and if these apply equally to wildlife and other natural resources. Secondly, the thesis tried to ascertain whether these new and widely accepted projects purportedly based upon community participation were really improving the livelihoods of poor rural people in Mozambique. It addressed research questions concerning how local communities undertook economic growth on a sustainable basis, which local institution provided an effective tool for the management of the natural resource use, and what were the rights, resources and responsibilities that local people should have. Finally, the research question was raised of what are the implications for current national policy if local institutions are empowered to

make their own decisions. In sum, the central argument of this thesis is that what people demand is to have a positive improvement of their livelihoods as the main objective, utilising conservation and resource management as an approach to ensure sustainability.

The research methodology chosen as being the most appropriate for this doctoral thesis was the qualitative methodology in a critical perspective. The subject of this thesis has been institutional development as a human creation involving people's interactions. The aim of this research was to try to understand local people's involvement in the development process, and to interpret their actions and choices from their own perspective and context. The research method used in this development-oriented research project was action research, characterised by the author's personal involvement, the emancipatory and empowering nature of this research, the active involvement of the local people researched, in sum it was in opposition to certain established policies and practices. The hypothesis postulated in this action research was that genuinely empowering local people could best ensure the conservation of the country's natural resources and deliver sustainable human well-being to local communities. To seek out the answers to those research questions the author used various methods of data collection, participant and marginal participant observation and informal interviews, an analysis of the literature on the community conservation experience in Southern Africa and in Mozambique, and two detailed case studies undertaken in Mozambique. The author hopes that this thesis can contribute to a greater understanding of local people and their political, social and economic contexts and how to achieve in practice a sustainable livelihood in Mozambique.

Due to the political dimensions associated with action research and the manner in which this research was conducted, this challenged the political ideology and the *status quo* of some powerful individuals and entrepreneurial groups. As a result it was not possible to complete the original scope of the field research. The research project was

neutralised by some individuals at the Ministry of Agriculture and Fisheries denying any further support for this project. Participation and collaboration with the local communities that the author and his research team were committed to developing in order to help solve local problems, made this research itself a case study to illustrate that genuinely empowering local people is likely to be obstructed by powerful groups. It is the powerful who manipulate and control others to create the social reality in a manner that satisfies the needs and wants of the powerful. These events also served to confirm the reluctance by some officials in central government, namely at the new Ministry of Agriculture and Rural Development, to move away from a top-down approach to development. However, the same officials still seemingly promote projects and national initiatives on CBNRM in Mozambique. In other words, there are influential people inside the government predisposed to persevere in subtle mode with top down models of development using CBNRM merely as a guise. The effective termination of this research project may also contribute to the on-going critique of centralisation in practice of government policy.

We turn next to consider if community conservation practices are appropriate in Mozambique and if these apply equally to wildlife and other natural resources, and to what extent they offer solutions to the efforts undertaken by the government to alleviate poverty in the country.

7.2. The disillusionment with the community conservation practices

It is worthwhile to begin this section with a quote from Norman Uphoff: "The essential feature of CBNRM is starting with communities, taking them into confidence and having confidence in them. It engages their ideas, experience, values and capabilities on behalf of resource conservation objectives, at the same time it seeks ways for communities

to become better remunerated and better served. It is prepared to accommodate local interests, needs and norms that are compatible with long-term preservation of ecosystems and their biological resources. There is a burden of proof on outsiders for proceeding contrary to these interests" (1998: 4).

Poverty alleviation is one of the objectives of the Mozambique government. The community conservation initiatives have been practiced in the southern Africa and in Mozambique promising to deliver benefits in order to enable rural people to improve their livelihoods thus decreasing the state of poverty in which almost all of the inhabitants live. As the author argued in chapter two, with few exceptions, the CBNRM projects in the southern Africa have been restricted to the sustainable use of wildlife, particularly big mammals and the related ecosystem in order to protect and to expand the wildlife industry. Given the strong wildlife tourism industry in the southern Africa region, wildlife provides services and goods of high value for the tourism market. Consequently wildlife could increase the rate of local employment and the amount of profits gained could be shared among all of the stakeholders alleviating local poverty. Although the local people get a share of revenues, the practice has demonstrated that it does not deliver the expected benefits to local communities and the local people are only managing benefits, which are passed on to them by the governments, tourism industry and conservation agencies. Without any other feasible alternative, the local community has essentially been the supplier of cheap labour and contributed to cutting down the costs of conservation.

The lessons of community conservation practices across Southern Africa indicate also that CBNRM initiatives as they have been practiced in the region, made little if any contribution to poverty alleviation. The fact of engaging different stakeholders with different concerns and expectations, means that poverty reduction of the rural poor, biodiversity conservation and economic exploitation by private enterprises do not

necessarily go together. It is even more likely that achieving one of these goals will lead to failure in reaching another one, particularly if the private sector develops sophisticated tourism infrastructure.

Although not exclusive to wildlife, only few community conservation projects in the region address other forms of natural resource utilisation. Exception has to be made for the case of Mozambique, which ironically has to import wildlife animals from the neighbouring countries. There is no doubt that the wildlife industry can deliver large financial returns, but in many areas in Mozambique for different social, economic or ecological reasons this may not be applicable. Thus the question remains: Do these community conservation initiatives apply equally to wildlife and to other natural resources? The use of other natural resources in a more integrated manner may offer greater possibilities for the people of southern African who are primarily rural dwellers and whose livelihoods are basically derived from the environment. This, however, needs to be rigorously investigated. For instance, forests, which are resilient ecosystems, have limits on their ability to withstand environmental change. Effective approaches for sustainable resource use require the harmonisation of human activities with the biological and physical aspects of forest ecosystems. Some empirical evidence from a variety of different locations also suggests that rural households engage in multiple activities and rely on a diversity of livelihoods, which is often overlooked by the outsiders. Some studies indicates that the forest provides only one part of a much broader local production system which contributes to satisfying people's basic needs.

CBNRM has been practiced in Mozambique since the end of the war, from 1992 onwards. The author argued, in chapter three, that although CBNRM projects may represent a new practice in conservation and development in Mozambique, the implementation of such projects has been another top-down approach. CBNRM has been

used by the government, tourism and conservation agencies in order to ensure the conservation of certain habitats in exchange for receiving pre-determined benefits. Although the experience of CBNRM projects can be interpreted by many Mozambican officials as making significant steps forward in ensuring the sustainable use of natural resources, local communities still remain alienated from active participation in Mozambican modern society, their resources are exploited, and their rights and benefits remain restricted. Moreover, people's priorities such as food, health, education, social security and social cohesion, and equal opportunities for access to the market, rarely are the main objectives of the conservation projects. In such an endeavour, without taking into account the needs and wants of the local communities, community conservation may become disillusioning for local people. New approaches taking into account people's livelihoods and their participation from the very beginning may help to solve the pervasive problem of poverty (see also Carney 1999; Adebowale *et al.* 2001). Without tne inner evolution by local communities to shape CBNRM as they desire for themselves, with an appropriate institutional reorganisation at all levels of society, in the light of sustainable development principle and approaches, the task of poverty alleviation may not be achieved in Mozambique.

In sum, the task of satisfying people's needs and wants still remains to be fulfilled and the majority of the community conservation projects have in practice been used to empower wildlife elites, tourism and conservation agencies. CBNRM projects with few exceptions are not improving the livelihoods of poor rural people. These projects have been mainly concerned with conservation rather than development. In fact, the conservation objectives have reduced poverty alleviation to an 'add on' status in project initiatives. In relation to CBNRM initiatives concerning the use of natural resources other than wildlife, this still needs to be rigorously investigated. Evidence presented in this

regard in this thesis suggests that CBNRM seems not to be the most appropriate approach to the process of rural poverty alleviation as was thought at the beginning. Therefore, CBNRM approaches in Mozambique may not be able to respond to the government task of poverty alleviation and local development. We turn next to examine the viability of local development on a sustainable basis by local communities.

7.3. Viability of local development sustaining the resource base

No community exists in isolation, and nowadays community development depends on markets. Communities have to be able to make arrangements for themselves as communities, rather than depending on outsiders. However, as the author argued in chapter two, institutionally, socially and economically there is a tremendous gap between the local people and other stakeholders. Local communities, which have been socially and economically excluded in the past, are unable to compete today with the private sector. For example, the elaboration of the project of 'Tanga Lodge' for the local community illustrated that the local people are aware of their limitations. The private sector has far more potential and opportunity to benefit from the natural resources than local communities. There is a tremendous risk that the outsiders usurp community benefits. Staying with the example of Tanga Lodge, the money made available to build the lodge was spent for other ends by CEF, who had received the money on behalf of the Tanga community. There is a need to ensure that local communities receive the same opportunities and privileges that private companies obtain from natural resource use. This means in effect that the challenge still remains of how poor local people can achieve their development goals.

Today communities need assistance with calculations on the value of their natural resource assets in order to accurately determine their contributions to joint ventures namely to settle appropriate levels of rentals, revenue and/or profit sharing, and the stake of enterprise ownership for joint ventures with private companies (Anon 1998: 5). Pacts of joint ventures should be transparent so that local communities, NGO(s), private sector and governmental agencies can clearly decide on the flow of economic benefits (*ibid.*: 5). In 1998, the participants of the community workshop held in Ponta de Ouro recognised that local communities are not well positioned to negotiate fair contracts with the private sector because of their inadequate knowledge of the value of their resources, legal options, and nature of tourism ventures (*ibid.*: 5). They suggest that an intermediary agency or agencies should be made available specifically to serve systematically local communities with legal and financial advice in the negotiation of contracts particularly with private companies, and support them in developing business skills (*ibid.*: 5).

The two case studies, M'Punga and Tanga communities, showed that the land is not only the subsistence base for local people's survival but it is primarily also a source of capital available for the development of their livelihoods. It is logical that the local community has a strong interest in maintaining its resource base. Only under abnormal pressure do local activities lead to the destruction of the natural resources. However, market forces can either promote a better livelihood or contribute to an unsustainable use of natural resources. For instance, the production of timber, charcoal and firewood around Tanga, can easily lead eventually to a process of deforestation in the area. The production of banana in the M'Punga area to supply the vast market of Maputo which is an important local income source, offers strong incentives for the locals to alienate vast areas of the forest reserve to open up new land for cash crop cultivation. The high demand for these products or any others and the lack of other income-generating alternatives may galvanise

the practice of the unsustainable exploitation of natural resources in exchange for a short-term and precarious livelihood. As seen in the case of M'Punga, the production of honey with modern techniques of beekeeping introduced by the research team is unlikely to succeed because of the lack of a market.

We can conclude that local communities are well aware of the limitations of their capacity and for the need to obtain assistance in order to sustain the resources base while undertaking the battle for economic growth. Land is what they have to protect for their survival and development. However, the following question remains: Do local institutions provide a legitimate and effective tool for natural resource use and management? And it is to this aspect that we turn next.

In almost rural areas of Mozambique, traditional leaders still have authority in their communities. The two case studies indicate that the traditional leaders have to secure both social harmony and control of the use of natural resources. The traditional institutions have been especially concerned with social dispute-resolution mechanisms over natural resources and other social conflicts within the community. They have a holistic function and are not exclusive to a given domain. Decree Law 15/2000, which recognised the traditional leaders, gave to them the responsibility to mobilise the community for government programmes, to protect and manage the local natural resources, promote local development, resolve local conflicts, and collect tax. This means that the traditional leaders have a holistic mandate and have to deal with inter-related social, economic and ecological issues at the local level.

The strategy of community involvement through community committees adopted by many CBNRM projects has continued to contribute to weakening the capacity of the traditional institutions to regulate people and natural resource use. Some government officials have viewed the new local community committees as a way to solve local

conflicts and to address the 'vacuum' of authority created during the various post-independence periods. The top-down approach adopted in implementing the creation of such committees has failed to actually empower local communities. The choice of community representatives to compose the committees has been based on different criteria manipulated by project staff. In most cases, project staff have brought forth a given formula to prescribe the committee members, their composition and number, gender equity, and in some cases have demarcated who must be included or who should be excluded from the 'election'. This 'prescription' in prescribing the local committees is more than paternalistic, it is an attempt to create an arm of the project staff or government agencies at the local level. How much support can the CBNRM project expect from the local people when the traditional institutions and leadership is not credable?

If any committee has to exist under the present law, the local people must be permitted to decide how it is constituted and by whom. The government officials must allow local communities to organise themselves. The author is in agreement with William Ascher when he argued: "Government officials have to avoid both the arrogance of ignoring local communities and the arrogance of overcontrolling community activities" (1995: 149). If, on the one hand, it is vital to endeavour to revitalise communities to organise themselves when it is needed, on the other hand, it is also indispensable to maintain the boundary between community and government institutions (*ibid.*: 149). The support expected from the government by the community is to enforce local management efforts and not to try to fill the blank that the outsider think may exists with imperious programmes or committees.

Our two case studies indicate that intention, motivation or commitment of the local community to the CBNRM project is shaped by the community member's interests, particularly of the local chief's interests and the way the problems and opportunities are

presented by outsiders. While in Tanga, exceptionally the committee was seen as a body to achieve common objectives between CEF and Tanga community to protect the forest, in M'Punga the committee were seen in a very different way. The M'Punga people viewed the committee members as project workers rather than as their representatives on the committee. However, in both cases, the committees were created by local leaders in order to satisfy the project demands, their members were selected from the community but without local people's participation.

The past wisdom of the 'fortress' conservation policy with its forest guard system, land expropriation and rejection of all traditional systems concerned with natural resources management and decision making, post-independence socialist ideas and policy of *grupos dinamizadores* and *aldeias comunais* have contributed to worsening the prevailing distrust. During the colonial and post-independence period, the local community had been excluded from resource management. But what individuals seek are material benefits and poor communities do not harbour residual collectivist socialist principles as idealised by the proponents and defenders of CBNRM schemes. The costs involved in making the Prime Minister of Mozambique, Pascoal Mocumbi, travel to Tete province to deliver US$15,000 to the Bawa community cost many times more than this amount. The people know that the private sector and government forces are against them. Today, local people face a dilemma in understanding why outsiders are demanding that they participate actively in decision-making over natural resources after their long experience of being denied of such a role. Moreover, the promises and expectations are never fulfilled by the outsiders, which has contributed to community frustration and distrust.

We can conclude that without a common agreed agenda and an environment of respect, trust and social cohesion between all of the stakeholders local development sustaining the resource basis will be a difficult task. Community livelihood approaches

may offer a better alternative to achieving sustainable economic development and it is to this that we turn next.

7.4. Community livelihood approaches

As the author argued in chapter two, evidence to date suggests that community conservation has not yet devolved rights in wildlife or other natural resources to local communities to the extent where these communities can use these rights to gain an increased stake in natural resource use. The weak devolution of tenure and user rights to local communities creates the possibility of community benefits being usurped by outsiders empowering national or foreign elites. Although the local communities get a share of revenues, the experiences reviewed in this thesis have demonstrated that it does not deliver improved economic benefits to local communities. They have little control over natural resource management, there is no equity in their utilisation, and there are few opportunities to provide goods and services to the tourism industry. The people are not managing their natural resources yet. The people are managing benefits, which are passed on to them by governments, the tourism industry and conservation agencies.

Traditional authorities, as the author argued in chapter six, have experienced different political challenges over time. They were utilised and manipulated by the colonial government, removed after independence by Frelimo, re-established by Renamo during the civil war, and recently recognised formally by the Frelimo government for their role in the local community. Rather than only being recognised as local managers of social conflicts over natural resource use, the traditional leaders' first priority emerged from a process of local political and social alliances for their re-empowerment and to be recognised as local partners of international or national institutions. Currently, the traditional authority is

closely bound up in the political confrontation between Frelimo and Renamo, the opposition party. Both political parties are competing to gain the support of traditional authorities in order to build up their political influence and exert their control over the people. These circumstances are also contributing to creating scepticism about the real purpose of government institutions in promoting community participation in natural resource management.

Both case studies have demonstrated that the people's priorities are essentially to protect their lands and obtain the communal land title, to have in place a functional health centre, a school and a market mechanism established. Their lands signify for them survival today, and the requested health centre means the ability to survive by combating diseases and in order to ensure that their children grow up healthy. The school represents the future and the aspirations of the community for a better life, and the market is the only existing mechanism for them to engage with and secure a better livelihood. Our two case studies suggest that the success of community livelihood approaches depend on the market opportunities for the natural resources. For instance, the protection of Tanga forest is due to the existing market for medicinal plants, by contrast in M'Punga, because of the banana market some of the forest patches have been cleared for the banana crop. "In view of the interrelationship between the natural environment and its sustainable development and the cultural, social, economic and physical well-being of indigenous people, national and international efforts to implement environmentally sound and sustainable development should recognize, accommodate, promote and strengthen the role of indigenous people and their communities" (United Nations 1992: §26.1).

From the colonial period onwards, people are still not being placed at the centre of integrated resource management in Mozambique. What people demand is to have the development of their livelihood as the objective, and conservation and resource

management as an approach to achieve sustainability. This new approach would engage a new set of development priorities, with greater responsibilities being given to local governments and communities. Food, health, education, social security and cohesion, and easy access to the market have been the priorities of the local communities. If the poor community's livelihoods comes first then sustainable development is the pathway to follow enabling local community participation to produce wealth and furnish a better future for those children abandoned and scattered in the country. For this to succeed, community livelihood approaches should be developed in order to genuinely empower local people to best ensure the conservation of the country's natural resources and deliver sustainable human well-being to local communities, a task, which however, has still to be achieved in Mozambique.

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Appendix: Poverty characteristics

According to DNFFB, rural communities have a historical dependency on the forest and wildlife resources and they are the principal consumers of these resources (1996: 2). Rural people in the late 1990's represented 2.7 million households with an average of four members per household (INE 1999: b). The main source of income for the majority of rural people is derived from agricultural production and natural resource exploitation.

According to Robert Chambers, poverty, understood as a lack of wealth or assets, and a lack of flows of food and cash, is linked to the two dimensions of location and resource base on the one hand, and of gender on the other hand (1983: 108). There are communities where poverty is linked to remoteness or inadequate natural resources, or both. In addition, there are circumstances where within the same community there are marked differences of wealth and poverty. Chambers also analyses the "clusters of disadvantage" at the level of households. Households are the common and distinct economic units involved in production, earning and sharing for consumption. Chambers presents five clusters of disadvantage, namely poverty, physical weakness, isolation, vulnerability, and powerlessness (1983: 109-11). In order to perceive the context of the poverty of more than two thirds of Mozambican people, these five interconnected features are described below, based on Chambers (1983: 109-11):

"The household is poor" in terms of assets. It has a small hut or shelter, made from local materials, little furniture, the family has few clothes and these are worn until they are very old and worn out, and the household has few tools. The household either has no land or has land that hardly assures subsistence. It has a small stock of domestic animals, notably chickens, goats and cattle. The only serious productive asset is the labour of its members (Chambers 1983: 109).

The household is also poor in terms of stocks and flows of food and cash. These are low, unreliable, seasonal and inadequate. The food and cash gained are essentially used for immediate needs. Fundamentally this means survival. The women work long hours on both domestic tasks and outside assignments such as agricultural production and water and firewood collection. When a member of the household is locked to a patron, the returns are very low. Normally all family members work in different tasks, except the very young, the very old, the disabled, and those who are sick (Chambers 1983: 109).

"The household is physically weak". It is seasonally hungry and thin, and its members are vulnerable to parasites, sickness and malnutrition. There is a high ratio of dependent people, such as young children, old people, sick people and handicapped. The women normally have the responsibility for childcare, food processing, cooking, drawing water, collecting firewood, and agricultural production (Chambers 1983: 109-10).

"The household is isolated". It is secluded from the outside world, from the centres of decisions, discussion and information, and of trading. Its location is peripheral, in remote areas, remote from towns and communications. Often members of a community are illiterate and uninformed. For example: "Most of the peasants in Mozambique are still ignorant about their country's new land law, which was passed by parliament almost three years ago", and this "law guarantees peasant farmers' land tenure rights, and demands that local communities be consulted over new projects that would affect them" (in Panafrican News Agency 20/10/2000; see also Virtanen 2000: 130).

Normally the children do not go to school. If a nearby school exists, they go, but typically leave early after only a few years of basic education. Its members ordinarily do not go to public meetings. If they go, they do not speak readily or easily. They travel mainly to seek work or to plead for help from relatives. They are restricted to their neighbourhoods by contract with a patron, by debts, urgent needs, or by lack of means for travel (Chambers 1983: 110). According to Pascoal Mocumbi, Prime Minister of Mozambique, on average, in the countryside, the nearest health centre is 46 kms away, a secondary school 66 kms away, the telephone 48 kms away, and the nearest market place for trading is 16 kms away (1998: 1).

"The household is vulnerable". The household has little if any thing put by for contingencies. Small needs, as they appear, are satisfied by scanty cash reserves, resources are made available by reducing consumption, by barter, or by loans from friends, relatives, patrons, and traders. Disasters such as crop failure, floods or famine, an accident, and social demands on the household such as sickness, a funeral, brideprice or a wedding, have to be met and make the household poorer. These costs are met by a household selling some of its assets. During the rainy season when food shortages occur along with sickness and agricultural work intensifies, the vulnerability of people also intensifies and may become critical when rain and agricultural production fail. The household is predisposed to sickness and death (Chambers 1983: 110).

"The household is powerless" (Chambers 1983: 110). The household or its members are a potential victim of predation by the powerful (*ibid.*: 110). The household is

ignorant of the law and does not have access to legal advice (*ibid.*: 110). "The formal state laws and norms concerning natural resources have relatively little practical meaning for the local population" in Mozambique (Virtanen 2000: 130), e.g. the "forest and wildlife legislation is little known locally" (*ibid.*: 130). The household has a low level of social status either by inheritance or forced upon it. The members of the household are in a weak position because they are poor in terms of negotiating for the sale of their labour, their products and assets. They are, quite simply, exploited by less poor people, moneylenders and merchants, urban people, minor officials and the police (Chambers 1983: 110-1) including by their poor recently-arrived neighbours through widespread 'police closed eye and deaf ear' thefts of crops and property as described by Graham Harrison in Mozambique (2000: 58-59). Conscious of the power of the richer rural and urban people and of their coalitions, they avoid political activities that might jeopardise future tenancy, employment, favours, loans, and protection. They know that in the short term, admitting powerlessness compensates (Chambers 1983: 110-1).