Tourism, Conservation and Local Livelihoods at Mount Kilimanjaro National Park

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ABSTRACT

There is a growing appreciation that the future of protected areas is contingent upon the support they receive from society. Because protected areas in Africa have their origins in expropriation and exclusion of people, particularly rural poor, the task of building support is challenging.

Contemporary approaches to building support reflect the assumption that improved environmental education, access to resources and employment opportunities and providing grants to local communities will change attitudes and generate support. These approaches fail to acknowledge the complex and dynamic nature of livelihood survival strategies that are dominant determinants of attitudes and behaviour of poor people. The research reported here was based on the premise that an understanding of livelihood strategies is a necessary prerequisite for engaging rural poor with intentions of building support for protected areas. Kilimanjaro National park was selected as a study site because the park authorities have adopted a conventional approach to relationship building with local people and because economic opportunities are limited by the seasonal and restricted nature of mountain hiking.

The nature of issues addressed by the study, which are deeply embedded in the socio- economic and behavioural context, made the use of qualitative methodologies as well as the integration of qualitative and quantitative methodologies compelling. The study was largely qualitative, drawing on both secondary and primary sources of data in the form of interviews and documentary analysis respectively. Field observations and discussions with respondents complemented the interviews.

Preliminary findings based on interviews with porters and guides indicate that livelihood strategies are complex and dynamic. The provisional understanding gained exposes a fundamental weakness in the 'silo' approach currently adopted to supporting local people. Whilst people have integrated livelihood strategies, government does not. It is suggested that this has far reaching consequences for the attitudes of local people; and that as the ice cap melts, this will become increasingly important. Suggestions for an integrated approach are made.

DECLARATION

I, Betrita Loibooki, do hereby declare to the Faculty of Science and Agriculture, University of Natal, that this thesis is my own original work except where acknowledged, and has never been submitted for a degree award at any other University.

Signature: ..... Date.....

Betrita M. Loibooki

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DEDICATION

To my late beloved mother Stella Lyinga Moshi.

ACRONYMS AND ABBREVIATIONS

ADMADE	Administrative Management Design
ANAPA	Arusha National Park
AWF	Afican Wildlife Foundation
BSP	Biodiversity Support Programme
CAMPFIRE	Communal Areas Management Programme for Indigenous Resources
CAWM	College of African Wildlife Management
CEAD	Centre for Environment and Development
CCS	Community Conservation Services
CITES	Convention of International Trade on Endangered Species
CP	Corporate Plan
DF	District Forums
EIA	Environmental Impact Assessment
FOREX	Foreign Exchange
GDP	Gross Domestic Product
GMP	General Management Plan
GNP	Gross National Product
IIED	International Institute for Environment and Development
IUCN	International Union for Conservation of Nature (World Conservation Union)
KINAPA	Kilimanjaro National Park
m.a.s.l.	Metres Above Sea Level
MKMA	Mount Kilimanjaro Management Agency
MNRT	Ministry of Natural Resources and Tourism
MAB	Man and Biosphere
MUA	Mountain Users Association
MZP	Management zone Plan
QR	Quick References
TANAPA	Tanzania National Parks
TALA	Tourist Agents Licensing Act
TAS	Tanzanian Shillings

TATO	Tanzania Association of Tour Operators
TCP	Tarangire Conservation Programme
TTB	Tanzania Tourism Board
TX	Tanzania Expatriates
UK	United Kingdom
UNESCO	United Nations
UNCED	United Nations Conference on Environment and Development
USA	United States of America
WCED	World Conservation for Environment and Development
WMA's	Wildlife Management Areas
WTC	World Travel Centre
WTO	World Tourism Organisation
WWF	World Wildlife Fund

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CHAPTER 1
INTRODUCTION

In rural Africa people depend heavily on natural resources for their livelihoods (Finsterbusch *et al.,* 1990). A legacy of conservation in Africa has been the exclusion of local people from many protected areas especially national parks, depriving them of their previous forms of livelihoods. Not surprising, this approach has resulted in conflict and in some places has forced local people to become poachers and enemies of conservation authorities (IUCN, 1999; Hulme and Murphree, 2001). As occurred in the early 18th century of nature conservation in the USA, most conservation in Africa followed a fortress approach that separated natural habitats and people (Wells *at al.,* 1992). Those living outside the park boundaries were increasingly excluded from use of the natural resources on which they had previously depended. This top-down approach to conservation generally failed to protect wildlife as fully as intended and brought hardship to local people (Lamprey, 1990). The inaccessibility of the national parks to the local people generally seems to result in a lack of interest in them despite their dependence on biological resources to provide them with life's necessities and amenities. To the local people the apparent forbidden country across the park boundary is a store of resources for their livelihoods: meat, firewood, building materials, medicines, recreation, spiritual instruction, solace, and aesthetic pleasure (Lusigi, 1982a). Through loss of access to resources they otherwise could use, they often carry costs of conservation without accruing benefits (Ghimire, 1991).

Within the broader spectrum of conservation areas and institutions, the creation of national parks has been one of the most commonly used strategies in Africa. National parks have traditionally excluded human occupation and exploitation and have been managed centrally by the highest competent authority of the country (West and Brechin, 1991). Sadly, the normal relationships between the inhabitants of these border areas and the staff of the national parks has been one of serious antagonism. As the human population increases and the pressures on most national parks mount, this confrontation is likely to increase (Lusigi, 1982a: Larsen, 1988), especially in areas where community conservation initiatives have not been established. Since the middle 1980s, this situation of antagonism has increasingly been addressed by a community-based approach aiming

to work closely with local people to draw on their knowledge and by contributing to their livelihoods (Brown and Wyckoff-Baird, 1992; BSP, 1993; Price, 1996).

National parks cannot survive unless those who plan and manage them acknowledge the needs of human populations, especially those who live in and around such areas. Since the start of the national parks movements more than 100 years ago, approaches to the management of national parks have undergone radical changes (Lamprey, 1990; Phillips, 1992). One of these has been the appreciation of the need to gain the support of local people living adjacent to the parks by making sure that they benefit, not suffer, from having a national park on their doorstep. Kiss (1990) states it is vital to fulfil this need if parks in developing countries are to survive.

Lamprey (1990) observed that if national parks were to succeed, they must have public support and the whole parks movement must become reconciled to political, demographic and economic realities. Whatever the future of national parks in Africa may be, it is conditional upon the degree of support enjoyed from the people locally (Lusigi, 1982b). Providing for local needs has prompted two different concerns. One is the survival of the national parks themselves. The other concerns the need to rectify an inequitable and even unjust situation in which people living around the parks apparently benefit little if at all, from them either materially or intellectually. If the future of the parks will have to depend on local people support, it is evident that the greatest challenge facing the managers of the parks and other protected areas in Africa is to win and retain that support particularly among their own neighbours, local agriculturalists and pastoralists (Lusigi 1982b).

The means to achieve support are recognised and practised on a limited scale in several African countries. On the material side, the provision of employment opportunities, development projects and services such as construction of schools, medical centres, roads and bridges, water supplies, and veterinary facilities form some of the benefits of tourism. On the intellectual side, national and local conservation awareness campaigns and environmental conservation education programmes are important in giving local people a sense of identity with the parks, and even a pride in them. The main problem remains the capacity of national parks such as the Kilimanjaro

National Park (KINAPA) to provide these benefits and contribute to meeting local livelihood needs in perpetuity (Lamprey, 1990; BSP, 1993).

Some of the roles historically ascribed to national parks have constrained the extent to which parks are guided by and contribute to the larger agenda of sustainable development within society. Nevertheless, parks continue to attract very significant resources and support, and there is evidence that these older conceptions are evolving into broader ones, which involve more stakeholders and have more direct linkages with the cultural and developmental priorities of society (Murphree, 1994; Bergin, 1996).

Conservation requires different institutions at different levels (local, national and international) in order to meet overall objectives. While there is an increasing emphasis on the need for strengthening local institutional capacity for conservation, there remains a clear need at the national level for institutions to implement national objectives for conservation and development. These national level institutions can also make a greater contribution to local communities where mechanisms are in place for communication, planning and benefit sharing (West and Brechin, 1991; Bergin, 1996).

Population growth and internal migration, coupled with changes in land tenure are exerting increasing pressure on the environment and natural resources in Tanzania (Mwamafupe, 1998). This is clearly reflected in Mount Kilimanjaro and its environs.

Few natural features worldwide are as well known as Mount Kilimanjaro. The mountain is of cultural and spiritual significance. The spectacular scenery of the snow-capped Kibo peak makes Mount Kilimanjaro one of the major tourist attractions in the country. For people living outside Africa, Mount Kilimanjaro has served as the backdrop for much of the art, literature and films about East Africa that have been produced outside Africa. Similarly, for the people of northern Tanzania, the mountain is central to much of their own oral traditions, religion and art (TANAPA, 1992).

Few places in the world have not changed in the last 100 years and thus what is most instructive at this centenary date is to consider what may be the environmental conditions on Mount Kilimanjaro in the next 10-50 years if current trends in population growth and resource use continue (Newmark *et al.* 1991; Mwamfupe, 1998). Much of the current stress upon the natural resources of Mount Kilimanjaro is a result of the dramatic increase in human population on the slopes of Mount Kilimanjaro. The fragility of the environment and the decrease/loss imply a limited capacity to absorb increased numbers of people and their demand for livelihood needs. The capacity of Mount Kilimanjaro to continue to provide these vital products and services is threatened by inappropriate and in some cases over exploitative use of many of its natural resources. For example, it is generally accepted that the felling of the forest will increase the magnitude of flood peaks and decrease the dry season flows of many rivers and streams, which will have future repercussions on the local communities surrounding the mountain and the whole Kilimanjaro Region (Bruen, 1989).

It is further believed that global warming is likely to change the character of the mountain, which will have profound effects on the vegetation and natural resource based enterprises, for instance agriculture and other means of livelihoods. These changes will also have profound effects on attitudes of the people, especially tourists coming to climb the mountain. The image and perceptions they have of the freestanding snow-caped mountain on the equator will suffer badly without snow.

KINAPA was selected for study because of the growing issues around satisfying the needs of conservation and those of local people, particularly since pressures for non-consumptive use makes it difficult for local people to directly access and harvest natural resources to cater for their household livelihoods. The mountain provides an opportunity to investigate the issues of local people living adjacent to the study area and the role that KINAPA plays in supporting local people, so that they can in turn support the conservation of the mountain for the benefit of current and future generations. National parks are increasingly being required to increase their contribution to local livelihoods at a time in history when global climate change is influencing the whole character of these areas. We need to understand the dynamics of these interactions.

Mount Kilimanjaro is such a dominant feature in the landscape that its presence determines the biophysical and human processes that ultimately regulate the well-being of local people. As such, there is a need to understand not only park-neighbourhood relations, but also people - mountain relations.

1.1 Research aims and objectives

The main aim of this study was to contribute to an understanding of the relationships between people, the mountain and KINAPA. The porters and guides who take tourists up the mountains are the common factor. The study set out to assess the types of benefits that porters and guides obtain, and to examine the ways in which this can influence their behaviour towards management of the park. Also considered are ways in which these benefits from nature-based tourism can get to household levels and impact the livelihoods of the people living adjacent to Mount Kilimanjaro. The specific objectives were to:

- interpret the literature and personal experience to construct the study's conceptual framework based on the employment opportunities and the associated benefits that porters and guides obtain from Mount Kilimanjaro National Park tourism;
- examine the ways in which benefit accrual from the mountain sustains the porters and guides' household livelihoods and thus influences their behaviour towards the management of the park;
- document efforts and successes of the Community Conservation Service (on support for community initiated projects) in relation to local people's attitudes towards KINAPA conservation efforts.

1.2 Structure of the dissertation

In order to set the context for the conceptual framework, Chapter 2 *'Changing paradigms for national parks'* provides the theoretical background and context to the study. Chapter 3 *'The study area and a research framework'* provides background information to the area in which the study was conducted, the management and objectives of national parks in Tanzania, relevant institutional arrangements with a focus on Kilimanjaro National Park (KINAPA). The latter part of Chapter 3 develops a conceptual framework to guide the study.

Chapter 4 *'Methodology'* outlines the approach to the study and explains the context for both the detailed research methods through which data were collected, and the more general philosophies upon which the collection and analysis of data were based. Chapter 5 *'Analysis of tourism and local people's livelihoods at KINAPA'* encapsulates the study findings. Chapter 6 *'Discussion'* provides an assessment of the study findings in relation to local livelihoods. The chapter focuses on issues that are critical to the determination of perceptions towards conservation. It also draws attention to the important need for there to be an integrated management of KINAPA, emphasising that the local people see it as an integrated system, but management is fragmented. In this respect, the Chapter highlights some institutional issues necessary for there to be an integrated system of management for KINAPA. The conceptual framework is revisited in the light of the study findings and commentary on its usefulness is made. The study is concluded in Chapter 7 where recommendations are made for a way forward.

CHAPTER 2
CHANGING PARADIGMS FOR NATIONAL PARKS

2.1 Introduction

The different types of protected areas in Africa face a host of problems. Some of these problems are deeply rooted in the historical processes and activities which led to their creation, mainly through forced removal and people's dispossession of the land. Thus, some writers strongly feel that problems facing protected areas in Africa today are partly a result of strained relations between the authorities and their neglected communities (Newmark, 1991). National parks in Africa are faced with a diversity of external pressures that require many different management strategies to tackle them. On the one hand, biological conservation issues such as species extinction, unsustainable natural resource use patterns are important; and on the other hand, development needs and desires for acquiring income are also compelling (Lusigi, 1982a). Moreover, the long-term processes of population growth, poverty, changing land and resource use patterns increase the pressure on national parks (WCED, 1987).

This chapter traces the acquisition and development of understanding of how to address the relationships between national parks and neighbours. This is then used in chapter 3 to develop a conceptual framework for the research. A conceptual framework is a 'mental model' developed in order to show how the world works. Senge (1990) believes that mental models have a significant influence on how we perceive problems and opportunities, identify courses of action and make choices. Conceptual models can help organise and guide the initial assessment, planning, implementation and evaluation of activities that aim to foster conservation and sustainable natural resources management. This process can further be used in the design of new activities, projects and programmes. It can be adapted and used to enhance or improve ongoing activities (Gentner and Stevens, 1983; Finsterbusch *et al.* 1990). With reference to the exploration of our changing world, an explicit mental model of understanding of the guides, porters and tourism component of KINAPA park-neighbour interaction can be developed. In order to understand the framework and to foster a better understanding of the research, the chapter provides an analysis of literature pertinent to the components represented in the framework

(Figure 5.3). It further provides structure and direction for this research by synthesizing ideas from the literature review of other fields of endeavour that have used similar theoretical concepts. Included are the origins of national parks, mounting pressures, attempts made to address these pressures, national parks as destinations, the national parks dilemma and finally concluding remarks.

2.2 Origins of National Parks

Historically, conservation and its strategies have been dominated by attempts to reserve places for nature, and to separate humans and other species from these (Hulme and Murphree, 2001). In Europe and North America, the establishment of formal conservation institutions began in the 18th century (Nash, 1973; Sheail, 1976). In the United States of America, the advance of the western frontier and the natural marvels revealed by exploration gave rise to the first national parks. This was followed by the establishment of the Yellowstone National Park in 1872, which created a model 'the fence and fine approach' (Wells *et al.,* 1992) for protecting areas of outstanding natural beauty or values for the benefit of current and future generations (Dzimbiri, 1999). This approach has since then dominated conservation thinking internationally, particularly the idea of a national park as being a pristine or wilderness area, and the notion of a nature reserve that is managed intensively. Similar government reservations of natural areas began to appear in the 1880's and 1890's in Canada, South Australia, New Zealand and in Africa (Filter and Scott, 1978).

Since then, many industrialised and developing countries have adopted the concept of national parks without tailoring it to their specific needs. For example, in many of Africa's protected areas there is evidence of oversights in some areas of planning adaptation (Wells and Brandon, 1992). World wide there are now more than 9,800 such areas covering more than 8% of the earth's surface (IUCN, 1994), and the result of their creation excluded people as residents, prevented consumptive use and minimised other forms of human impact (Hulme and Murphree, 2001).

For a majority of Africans biodiversity is a matter of survival. Their livelihoods depend on a great variety of biological resources for food, fuel, medicines, housing materials and economic security. Indeed this diversity also provides a safety net for those who fall on hard times

occasioned by famine and structural adjustment programmes. Because the protection of biodiversity is necessary for the maintenance of the biological resource base, biodiversity is not an abstract or theoretical issue for Africans it is critical for life at the grassroots level (The Biodiversity Support Programme, 1993).

Studies have shown that traditional conservation in sub-Saharan Africa and elsewhere, has frequently been based on the idea of minimising the occurrences, and mitigating the impacts of human activities on national parks (Hales, 1989; Cumming, 1990; Neumann, 1992a; IUCN, 1993). The institutions created to protect these areas were likewise, based on an exclusionary and militaristic model (Ghimire, 1991; Owen-Smith, 1993; IIED, 1994). While surrounding communities rarely had any recognised stake in the conservation of protected areas, parks and reserves were in many instances, the domain of the foreign tourists, researchers and conservationists (Dixon and Sherman, 1990; Bromley, 1994). The early national parks established in Africa included the Sabie Game Reserve subsequently Kruger National Park in South Africa established in 1892, followed by the game reserve enclosing Amboseli National Park in Kenya in 1899. In 1905 Selous in Tanzania was declared a Game Reserve, the Park National Albert 'Virunga National Park' in Congo 1925, and Serengeti was declared as a Game Reserve in 1929.

2.3 Mounting pressures

The term 'national park' according to the IUCN definition of a category II protected area, is defined in Box 2.1.

National parks are defined as: Natural areas of land and/or sea, designated to:

- Protect the ecological integrity of one or more ecosystems for present and future generations,
- Exclude exploitation or occupation inimical to the purposes of designation of the area and
- Provide a foundation for spiritual, scientific, educational, recreational and visitor opportunities, all of which must be environmentally and culturally compatible. National parks have been established as a second management category of protected areas under IUCN.

Source: IUCN, 1994

Box 2.1 National Parks definition

National parks have been the most common and well known type of protected areas (Thorsel, 1992). Creation of these areas has commonly been at the expense of local people who previously inhabited or used the area even though this may have been at low intensity. Parks have traditionally excluded permanent human occupation, and exploitation, and management has been centralised by the highest competent authority of the country (Mbaruka, 1996).

In some cases, establishment entailed either partial or complete eviction from the ancestral land and/ or the curtailment of the use of natural resources of the resident local people. In many locations the relationship between the park and local population was thus marked by antagonism following a history of displacement and/or exclusion (Lusigi, 1982a; Western, 1989; Ceballos, 1996). This situation is revealed in the initial establishment of the parks and game reserves in East Africa, where local people's needs were overlooked and mechanisms to cope with ensuing conflicts have commonly been non-existent or inadequate (Bergin, 1996). This has resulted in a conflictual relationship between local people and protected area authorities. In addition, park-people conflicts have in recent years, been precipitated by the growth in human population coupled with poverty, declining productivity and an increasing demand for natural resources around national parks in Africa. The long-term process of population growth, changing land tenure, land access and resource use patterns are continuously increasing the pressure on parks (Newmark, 1991; Loibooki, 1997). Moreover, these land use practices outside parks are commonly incompatible with wildlife conservation as they may lead to deforestation, soil erosion, overgrazing and destruction of wildlife habitats (Lusigi, 1981), the effects of which spill over into national parks.

Contributing to the debate on population pressure and demand for natural resources, the World Commission for Environment and Development (WCED, 1987) reported that developing countries are characterised by poverty and therefore prone to ecological and other crises. The WCED further stated that, those who are poor and hungry will often destroy their immediate environment in order to survive; they will cut down forests; their livestock will overgraze grassland; they will overuse marginal lands; and in growing numbers they will crowd congested cities.

The alienation of local people by conservation authorities has been reinforced by the sharp discontinuity that has developed between the social and economic situations inside and outside many conservation areas. The tendency has been for the conflict between local communities and conservation authorities to increase as populations have increased, placing greater demand on the land as access to land has been restricted (Venter, *et al.,* 1994).

It is in the national parks where access for human settlement (except for the parks personnel, scientists, tourists and associated facilities; for instance hotels, visitor centres and entrance gates, staff housing), hunting, grazing, cultivation, logging etc. is strictly forbidden (Larsen, 1988). The forced dislocation of local people with growing needs, and the discontinuity of use of natural resources have violated human rights and dispossessed traditional peoples of the lands upon which they had based their livelihoods (Lusigi, 1982a; Goodland, 1985).

Arguably, the creation and operation of national parks, have further deliberately or accidentally disregarded local people in the entire process of policy formulation, planning and management (Myers, 1972; Western and Pearl, 1989). Several studies have shown that in many sub-Saharan countries, a militaristic emphasis on wildlife preservation in parks and reserves at the expense of the local people, had its origin during the colonial era. The colonial era of protected areas in Africa was marked by the alienation of land by the colonial powers to establish national parks and game reserves (ART, 1999; Gibson, 1999). In the past wildlife was accessible to most communities and hunting was an integral part of local tradition. Reflecting on the pre-colonial era, one old man from Zimbabwe recalled:

> "It was a simple life. At that time we could go hunting anywhere we liked. No one claimed possession of wild game. Not every one could hunt elephant. Only special people could hunt and inflict injuries on them. When we returned home we would celebrate. Elephant meat is good meat. It is a mixture of all game and has big chunks of every type. Everyone was invited to come and take out the meat he wanted to carry home. When an elephant had been killed the word went round" (Cited in Jansen, 1992:36).

The establishment of national parks during the colonial era brought mostly adverse consequences for the indigenous population, creating a legacy of hostility, which has continued to the present day (Mclvor, 1994). Many African countries persisted with such an approach after independence in the 1960s (Wells *et al.,* 1992; Gibson, 1999). According to Owen- Smith (1993) the truth is that little has changed since the end of the colonial era. He further suggests that, for the vast

majority of black Africans, wildlife is still seen as belonging to the (now black) government or wealthy elite. Parks in most African countries continue to be visited mainly by foreigners, while the often-sited economic benefits of tourism accrue mainly to foreign-based companies and urban elites (West and Brechin, 1991; Figure 2.1). Based on this perspective, Bergin (1996) considers that parks were, and continue to be inappropriate and inimical to justice and development in Africa. It has been suggested that until recently, the paradoxical response by the conservationists to mounting pressure for use of resources has been to tighten restrictions and exclude certain forms of human activities inside national parks (Newmark *et al.,* 1994). The destruction of wildlife, which led to the desire to protect in national parks, reduced availability of natural resources generally. The re-growth of the populations inside (Figure 4.1) led to perceptions of resources that should be available to alleviate hardships, which has been reinforced through poverty, population growth and natural events like droughts. The sense of success for protection inside national parks created opportunities and a growing appreciation among neighbouring communities of the opportunities they had to use wildlife for economic and social benefits, and found expression in Administrative Management Design for Game Management Areas (ADMADE) and Communal Areas Management Programme for Indigenous Resources (CAMPFIRE).

Some National Parks were established out of concern at the exploitation of wildlife. After protection, wildlife populations built up inside whilst they continued to be depleted outside. The widening gap between populations inside and outside protected areas contributes to the perceptions of deprivation. These are fuelled further by poverty and need.

Consequently, the establishment of parks and reserves has tended to bring local communities into conflict with park management. In addition to being alienated from their land, adjacent communities tend to suffer extensive crop damage from marauding animals (Pittman, 1992). These animals which are protected by law even when they are destroying the livelihoods of the local people, are endlessly photographed, or in some cases hunted by foreign visitors for large sums of money. While tourism may have brought some jobs and stimulated a craft industry around a few national parks, it is that sense of alienation and dispossession that has remained uppermost in the minds of the local people. Conversely, occasional economic returns to neighbouring villages still leave the fundamental question of land ownership and management of

indigenous resources unanswered (Rogers, 1992). Yet, levels of compensation for crop damage, farmers are anxious to point out, are either minimal or non-existent. Nor do the neighbouring people have access to park resources such as meat, grazing areas, wood or other products. Under these conditions it is little wonder that poaching of wildlife and destruction of fences have become increasingly common (Mclvor, 1994).

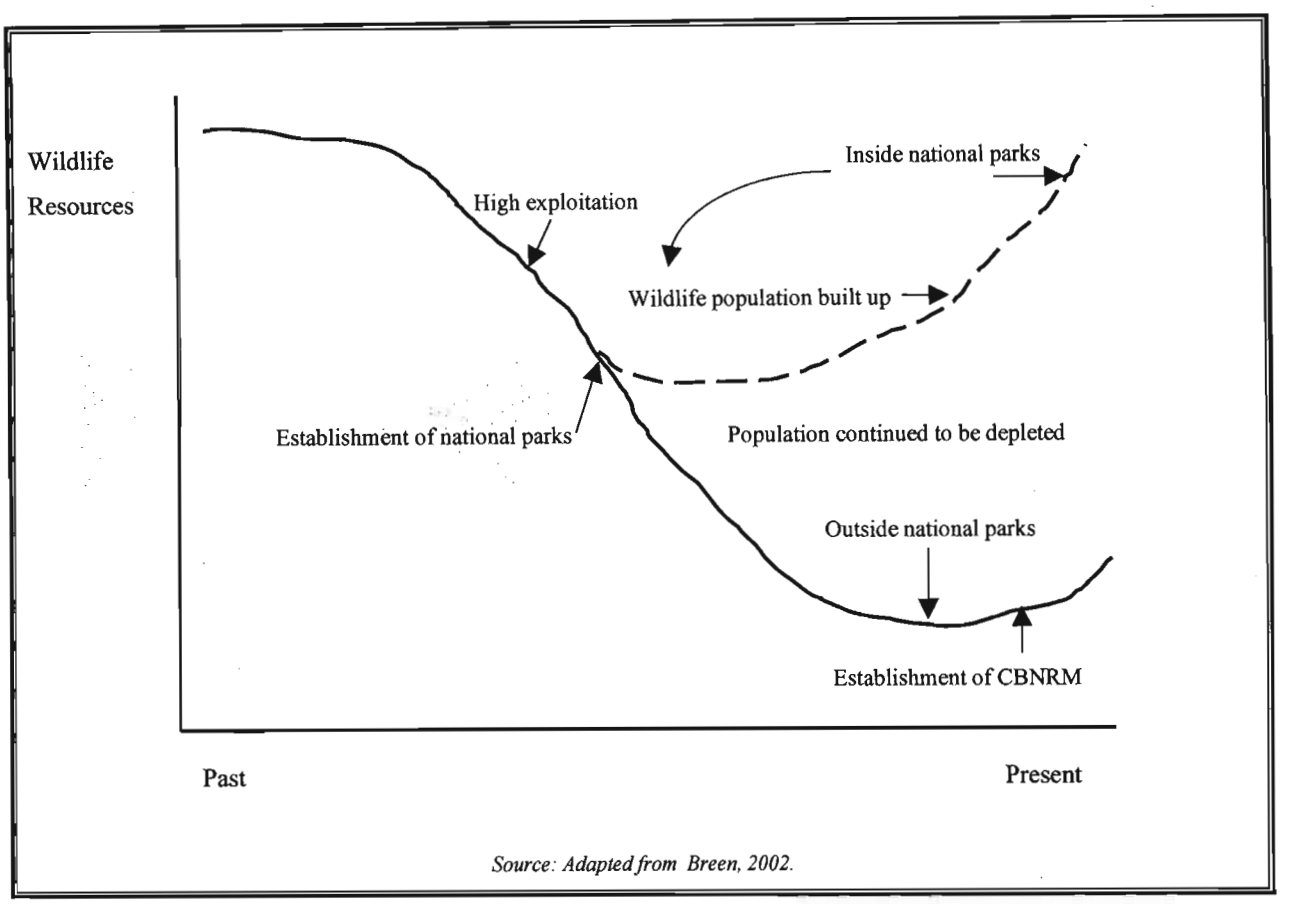

Figure 2.1 Depiction of changes in wildlife resources in and outside national parks in Africa

At the International Congress on Eco-tourism, Lawson and Hunter (1991: 1) pointed out that:

> "It is not surprising that many local people, displaced from their ancestral areas and their traditional hunting rights, did not view these developments favourably. When these areas were given primarily to photographic tourism these resentments were compounded. Local people saw these areas established for the apparent main aim of providing somewhere for foreign wealthy tourists to photograph wild animals with none or very little of monetary benefits from those operations flowing into local economies. They certainly did not appreciate any foreign exchange benefits. In short, poor local people were divorced from their own resources and further impoverished as a result of 'conservation'. These preservationist tactics have not worked anywhere in Africa"

2.4 Addressing the pressures

Two quite distinctive trends can be observed in the evolution of relationships between national parks and the public, particularly those who live adjacent to protected areas. Parks such as Glacier in the United States of America were developed in conjunction with entrepreneurs, particularly the railroad companies, who desired greater revenue from passengers. Wealthy tourists traveled west to holiday in hotels set up by the railroad company in Glacier. These parks therefore, have been strongly influenced by private sector entrepreneurs and it was only later in their evolution that park management sought to strengthen their regulatory powers (Wood, 1992; Breen, 2002 pers. comm.). In addition, in developed countries, the people visit the national parks in large numbers, sometimes almost overwhelming numbers, creating serious problems for the park authorities. However, these parks receive powerful financial and political support from the citizens of those countries (Lamprey, 1990).

By contrast, in most African countries the situation is completely different. While the parks may be frequented by numerous foreign visitors from affluent countries, the ordinary citizens of African countries cannot afford the entrance fees even at special residents' rates. The parks seem to them to be reserved for foreigners, especially as entry is usually only by motor vehicles and few African citizens possesses them (Lamprey, 1990).

Most parks in Africa had their origins in policies for protection and exclusion so that both entrepreneurial opportunities for and participation by local people were restricted. This marginalisation of people from the resources and opportunities afforded by the protected areas fuelled conflict and led to increasingly strident calls for participation. At first the response of the authorities was to 'educate' people in the belief that if they understood the intention of, and need for conservation there would be fewer conflicts (Wells and Brandon, 1992). When this did not work (not surprisingly as it hardly addressed either perceived need or opportunity), the emphasis shifted to providing tangible benefits through financial and logistical support for communities living adjacent to the parks. This too did not address sufficiently the perception of deprivation, and so it gradually gave way to granting greater access to harvesting and resources hunting and finally to commercialisation of opportunities. In this way, African parks have moved closer to the model that has been in existence since its inception of parks such as Glacier (Breen, 2002 pers. comm.).

2.4.1 Actions taken to address the pressures

Heyman (1992) observed that, traditionally the international and national conservation efforts have tended to conserve natural resources through the establishment of national parks and other protected areas. Historically, the strict law and regulation and the non-consumptive use philosophy of all national parks in Africa has not been favoured by local communities living adjacent those areas (Kajembe, 1994). In many cases, the park law enforcement staff preventing illegal activities resulted in violent confrontation between themselves and adjacent communities related to poaching, wildlife-damaging crops, traditional hunting rights, honey gathering, fire etc. The protected areas have become islands in areas characterised by poverty and depletion of resources and are inaccessible to local villagers (Mbaruka, 1996). Success in reaching conservation goals was increasingly recognised as linked to success in promoting development objectives (Little, 1994). The development literature itself reflected a new emphasis on the requirement for local people to be subjects rather than the objects of the development process (Cernea, 1985; Chambers, 1986; IIED, 1995). The national park authorities developed strategies in the course of creating awareness within the public and the local communities over the current and future objectives of managing national parks for sustainability. These strategies included conservation and awareness education for the local people.

Brown and Wyckoff-Baird (1992) consider that many people living adjacent to national parks have little understanding of conservation and management systems and their role in the environment. Local people have limited ideas concerning the value of what is being protected and the short and long-term benefits of protecting them. It was considered that not only would conservation education increase local people's understanding but also increase their commitment to preservation of natural resources (Wells and Brandon, 1992). Conservation education among people was becoming increasingly obvious because of the perceived need for local communities to be made fully aware of how national parks' creation and operations could affect their lifestyle and community positively and negatively (BSP, 1993). There was a need for people to better understand the economic values of these unique backcountry regions and to protect them accordingly: a process, which could only be achieved through better education and communication, along with benefit accrual to the locals in support of their livelihoods.

In addition, there was also an understanding that benefits could not be realised unless local communities were to participate in one way or another in conservation initiatives (Stevens and Sherpa, 1992). Such initiatives include direct and indirect employment of local people in and outside the national parks, and support for community development initiated projects. This scenario gave rise to another conservation strategy namely local people participation. Local people participation has been defined in a variety of ways in the literature. According to Paul (1987) community participation is the process whereby people act in groups to influence the direction and outcome of development programmes that will affect them. Participation may thus be thought of as the deliberate action of the people and government to respond jointly in the formulation, planning and implementation of a strategy to satisfy a particular need (BSP, 1993). Further, participation may best be defined as a continuum, from limited input into decision making and control, to extensive input into decision making, to ultimate stewardship of the resources (Brown and Wyckoff-Baird, 1992).

There has in the past been a lack of effective participation in the decision-making and benefits distribution processes of natural resource management, which continued from the colonial era. For example, governments have been establishing and implementing policy, legislation and institutional frameworks for wildlife management without the effective participation of local people. This has led to conflicts between government structures and local people, contributing to uncontrolled and unsustainable utilization of wildlife resources (Gibson, 1999).

Latterly, the concept of local people participation in the field of conservation has become more prominent. It was realised by many conservationists that local people must be aware of how national park operations (e.g. tourism) can affect their lifestyle and community positively and negatively (Byers *et al.,* 1992). It was suggested that local people should be invested with some decision making power with regard to the impacts that national parks, and especially tourism exert upon them. The 'parks with people' strategy whereby local people are involved in the management of, and derive benefits from national parks was widely endorsed by international governments and donors. This participatory model was integrated into the management policies of some national parks (Stevens and Sherpa, 1992).

The greater awareness of the need for participation led to the development of new concepts, for example community conservation[1] (Barrow *et al.,* 1995). The Brundtland Report and the UN Conference on Environment and Development at Rio in 1992, states that community conservation equates with sustainable development and hence it encompasses policy commitments. Underlying this is the moral argument that conservation goals should contribute to and not conflict with basic human needs (Gleick, 1999). Community conservation provides a conceptual framework within which local benefits could be made to acrcrue in and around national parks and other protected areas (WCED, 1987).

Empowerment can also take place in non-protected areas (land outside national parks) that are communally owned by local people. For example the Administrative Management Design (ADMADE) Programme in Zambia laid a foundation for the empowerment of local communities to manage 'their'[2] natural resources on a sustainable basis (Heath, 1992). Local communities are directly involved in the protection and management of their wildlife resources in the game management area and a significant portion of wildlife revenues particularly from safari hunting are returned to them. This situation has helped to reduce misunderstandings and the feeling of the adjoining reserve being mostly for the government, which can result in the general antipathy towards such reserves (Ntiamoa-Baidu, 1991b).

Increasingly, direct cash benefits are accruing to local people in support of their livelihoods which often bear the social and economic costs of having large mammals permitted to roam their land. For instance, the Communal Area Management Programme for Indigenous Resources (CAMPFIRE) in Zimbabwe is one of the most widely known efforts to simultaneously promote conservation and development in unprotected areas in Africa. Despite teething problems (Murombedzi, 1992; Murombezi, 1995) CAMPFIRE is becoming increasingly accepted as a viable form of land use in marginal land areas (Heath, 1992). The national park authority has played a major role in facilitating the benefit accrual by local people from areas outside the park through encouraging them to enter into joint venture agreements with investors and to utilise

[1] Community conservation can be defined as a strategy for the attainment of conservation objectives, which is based on the inclusion, rather than exclusion of local people's needs and aspirations (Bergin, 1996).

[2] The state retained ownership of resources but delegated certain management functions to local people.

local wildlife populations or those in adjacent national parks. District councils benefit through the creation of jobs and of the markets for locally produced products (*ibid.*). Through empowerment, local people are now able to make decisions on conservation issues, participate fully in conservation policy formulation and have become stewards of the natural resources in their autonomous areas (BSP, 1993).

Furthermore, because of these long-term contradicting consequences of national parks and other destination areas, the United Nations Environment Programme (UNEP) in co-ordination with World Tourism Organisation (WTO/OMT) declared 2002 as the international year of ecotourism. These international organisations are offering an opportunity for interested local and national stakeholders to review the social and environmental benefits that the ecotourism industry when suitably developed, can offer host countries. The year is intended to be a time to review the ecotourism industry's impact on biodiversity, its potential contribution to sustainable development, its social, economic, and environmental impacts, and the degree to which regulatory mechanisms and voluntary programmes are effective in monitoring and controlling those impacts (http://www.ecotourism2002.org).

2.5 National parks as destinations

National parks are obviously some of the prime natural attractions and destinations for tourists (Wood, 1992). Their designation preserves a resource base that might otherwise be exploited for logging, mining, hunting, agriculture or simply be invaded by others seeking land (Wallace, 1992). Ever since the origins of tourism, travellers have been moved by, and drawn to nature. World wide, national parks are important components of the tourism trade (Norris, 1992). Generally, tourists come to African countries mainly to experience the wildlife, beaches, culture and history, and to mountain climb and for other related activities (Lejora, 1995). Many parks are currently experiencing substantial increases in tourism, much of which comes from high-income countries or from affluent domestic urban populations. This sort of tourism is commonly called 'ecotourism'[3] a word that describes both the motivation of tourists (to visit natural ecosystems),

[3] Ecotourism is defined as a "responsible travel to the natural areas that conserve the environment and improve the well-being of the local people" (Honey, 1999: 6).

the expected benefits to be had from it, and the improvement of local people's well-being (Boo, 1990; Ceballos, 1996; Honey, 1999).

It has to be realised that a tourism undertaking that loses money and fails to promote socio-economic benefits for the locality, will simply cause more problems for national parks than already exist. That is why park authorities are expected to place a high priority on the management of tourism activities in their parks.

One way of involving local people in conservation efforts for their benefit is through their employment in tourism activities taking place in national parks and other destination areas (Ceballos, 1996). Although many people have embraced tourism as an opportunity to generate income and employment, it can bring negative effects (e.g. demand for resources and waste generation) if mechanisms for control and monitoring are not in place. Ashley, (2000) argues that in some rural areas tourism is perceived as a chance for an additional activity to combine with existing livelihood activities.

2.5.1 Structure of the industry and financial leakages

Tourism is becoming increasingly important in national parks and especially on communal lands (Lindberg and Hawkins, 1993; Wells, 1997). Nature based tourism and tourism to developing countries, are among the fastest growing sectors of the tourism industry, which is itself the worlds largest and fastest growing industry. Tourism currently generates ten percent of the world's income, and employs ten percent of the world's work force (Ashley, 2000). The size of tourism is expected to have doubled by the year 2015, with an anticipated one billion tourists per year (Asley and Roe, 1998). These statistics support the contention that tourism has enormous potential to influence development in developing countries and particularly in the national parks and rural areas where much of the tourism occurs, and where the search for more exotic destination continues.

Recent World Tourism Council statistics show that the tourism sector employs over 100 million people, 3 million of whom are from Africa (Hawkins, 1992). Tourism has generated significant benefits for some developing countries, becoming an economic mainstay and significant source

of foreign exchange and employment. In spite of recessions, civil disturbances and natural catastrophes, international tourism continues to grow. However, there is growing concern that little of the revenue from tourism reaches the local people (Whelan, 1991).

Recent literature relating to tourism and theories of post modernism have shown that tourism is actually a diverse and complicated sector (MacCannel, 1999). Past approaches failed to understand the complexities of social, economic and cultural contexts in which indigenous livelihoods, productions and management systems function (Rist, 1997). The failure of past approaches shows tourism is much more complex than we thought. Ceballos (1996) views the industry as highly fragmented with many different participants ranging from a 'tourist' to a one person operation selling home-made souvenirs or offering guided tours (as a host), to a large multi-billion dollar tourist agent world wide. This chain of different players in the tourism industry causes money to leak out beyond the host to nearby regions leaving local people and the destination areas with very limited options for their livelihoods and operations. Lindberg and Hawkins (1993) observed that leakage[4] is evident when most expenditure occurs distant from the destination areas.

Studies in Africa have shown that much of the component that is spent at the local level in the destination area is used to purchase inputs deriving from distant sources. So, much of this cash leaks out leaving very little to circulate and build local economies (Healy, 1994). A solution is perceived to be reduction of leakage by regulating local production of goods and services. This is fraught with problems such as meeting quality standards, fluctuating market demands, maintaining consistency of quality supply, achieving competitive ability and economies of scale, acquiring knowledge, skills and expertise. These challenges test the capacity of local people and leads to somewhat limited local opportunities (Breen, 2002 pers. comm.).

Another problem is that whilst the existence of national parks tourism operations and the associated investments are expected to offer possibilities for domestic production of food stuff

[4] Financial leakage occurs when a considerable amount of tourism revenue is not spent in the actual destination area to profit the local people, but is used for purchases of goods and services e.g. food stuffs, accommodation facilities, or travel in overseas and other areas outside the destination area (Ceballos, 1996).

(including fruits vegetables, aquaculture products), the perceived potential of tourism has not been achieved to benefit the indigenous people in destination areas (Lindberg, 1991; Boo, 1990 cit. in Lindberg and Hawkins, 1993). This is illustrated, for example at St. Lucia (South Africa) where very low proportions of some food products that were consumed in hotels were of local origin (Table 2.1). This shows that money spent locally leaked from the local economy.

Table 2.1 Financial leakage from the local economy at St. Lucia

The percentage of selected food items consumed at local hotels in St. Lucia (South Africa) that were purchased from outside suppliers. The data indicate financial leakage from the local economy.

No.	Product	Percentage
1.	Meat	86%
2.	Sea foods	19%
3.	Dairy products	99%
4.	Staples	30%
5.	Vegetables	53%
6.	Fruits	7%
7.	Others	97%

Source: Ceballos, 1996.

These statistics are consistent with those from other tourist destinations. A study conducted in 1987, for example, estimated that of the money generated by tourists in the Pacific Islands, only 25-30 percent stayed on the Islands. The other 70-75 percent of revenues leaked out of the country (Mclvor, 1994). Writing of the need to establish local control of tourism and leakages within the indigenous economy, one author warned:

> "Imports balloon, catering for dollar-bearing tourists and locals who like to copy their tastes. The things that tourists need are often imported. Even a large growth in activity can partially be offset by tourists' dollars leaking out as debts are serviced and profit repatriated. In the soiled paradise of Tahiti, for example, where tourists' numbers are dropping, nearly every tourist amenity, even the sarong worn by dancing girls, is imported" (O'Grady, 1990:9).

A similar situation prevailed in the Caribbean Islands where commodities including clothing and souvenirs are imported from outside the region (Ceballos, 1996). In short, consumer preferences and marketing promote leakage. There is growing realisation that little of the money spent by tourists remains at or near the destination itself. In some cases the amount of money that actually reaches a destination area is far less than the amount leaked out to pay for outside goods and services. According to the World Bank, as much as 55% of the developing world's tourism profit leaks back to the developed world as a result of the need to import goods and services (Lindberg,

1991). This means that local people are marginalised from opportunities to derive income from tourism activities, and this contributes to their negative attitude towards national parks tourism. Ceballos (1996) observed that other forms of financial leakages are found in the size and style of tourism facilities: the bigger the facility the higher the leakage and vice versa.

2.5.2 Implications for local people

According to Ashley and Roe (1998) tourism is affecting the lives of local people living adjacent to national parks across the world. They observed that for some communities, tourism is a driving force for their rural development, while for others it brings mainly negative impacts. In many communities the impacts are highly differentiated. Lindberg (1991) argued in either case, the ways in which people have been involved have helped shape the benefits and costs they experience.

Several studies have shown that although tourism can be characterised as a multi-sectoral phenomenon, local people whether living within or just outside national parks, have seldom been involved in tourism development (Dixon and Sherman, 1990). In less developed countries, local people in rural areas tend to comprise the less prosperous strata of society therefore involving them in tourism activities could do much to enhance their economic situation and living conditions (Milne, 1990; Ashley, 2000).

The support and commitment of the local people are crucial if tourism in national parks is to be an effective development tool (Young, 1992). This implies that local people must perceive the stream of benefits to be gained from the environment as worthwhile (Wallace, 1992) and be willing to protect and share this resource with tourists, and possibly even to be prepared to forgo some of their usual activities.

Whilst tourism is claimed as a significant source of jobs for local people (Bergin, 1996), these are commonly unskilled jobs such as cleaning and cooking in hotels and lodges, guiding and portering with few prospects for advancement to higher paid employment (Ashley and Roe, 1998). For instance, studies of the impact of tourism in Cuzco, Peru have shown that of the 280,000 economically active people in the region, only 6,000 (just over 2%) are directly or

indirectly employed by the tourism industry, mainly in service level positions as waiters, maids, guides and porters, while experts drawn from elsewhere fill the middle and top management positions (McLaren, 1998 cit. in Ashley and Roe, 1998). In New Caledonia, Fiji and Hawaii, outsiders usually occupy upper level positions while lower paid jobs such as those of waiters and waitresses, shop-clerk, labourers and maids are given to locals (O'Grady, 1990).

There has been a growing realisation that the participation of local communities in nature tourism has been constrained by the lack of relevant skills, knowledge and experience, the lack of access to capital for investment, and by the inability to compete with well established commercial operations and importantly, by the lack of ownership rights over the tourism destinations (Wells, 1997). This situation especially in developing countries, has put local people in inferior and weak positions within the tourism industry.

Experience elsewhere has shown that the involvement of local people in tourism ventures has resulted in benefits and costs which are not always shared equitably (Ashley and Roe, 1998). The demands of tourists can lead to additional hardship for local people. In some areas tourism development has led to the depletion of natural resources such as water supplies and to the over burdening of the already stressed local infrastructure (Lindberg, 1991). For example, the sharing of water between Robanda Village near Serengeti National Park in Tanzania and Sengo Safaris partnerships has exhausted the water source at the expense of the Robanda local people around the areas (Loibooki and Njoroge, 2000).

Tourism tends also to raise commodity prices so that local communities suffer economically (Price, 1996). In Zimbabwe, the Tamanrasset area 'tourist show piece' as it has been called, the hotels, cafés and shops surrounding it formed a small private enclave of development, surrounded by poverty (Mclvor, 1994). Many townspeople suffered because of the rise in the prices accompanying increased demand and the presence of the new, richer customers. Due to a rush to build new hotels and shops, the price of land increased tenfold and local people could not buy sufficient ground nor build a 'decent' house. This was aggravated because building materials are imported from the north and prices have risen.

Berger (1996) observed that whilst increasing numbers of Kenyans are benefiting from tourism, there are costs to this benefit. Some have made external business links and political affiliations,

which have weakened local solidarity and enabled outsiders to exploit natural resources and culture. For instance, some local people engage in a range of economic opportunities: they own lodges and game viewing vehicles, operate cultural villages, have become partners in safari companies, lease their land for camps and hotels, own service shops on tourist routes and have established their own Maasai sanctuaries and tour ventures (Hall and Lew, 1998). Barrow (1997) questions whether the benefit accrued from national parks and community/private sector partnerships and/or concessions, is actually getting to the community members at the household level. The evidence indicates that whilst there is growing participation of local people in the tourism and conservation economies of national parks and other protected areas, there is substantial financial leakage, which together with failure to build capacity, contribute to ongoing marginalisation.

2.5.3 Implications for national parks

The high economic value of wildlife and the need to maintain it for the benefit of present and future generations, provides a major justification for wildlife conservation and its associated livelihoods (Hulme & Murphree, 2001). Experience has shown that making money from tourist visitation is among a relatively short list of potential economic benefits that can coexist with resource protection (Lindberg, 1991). It is therefore important to note that the social and economic well-being of the locals adjacent to national parks is an essential consideration if the statutory objectives of the national parks are to be met. Employment in the tourism and related service industries must, therefore, be regarded as an important element of the economy of national parks. Boo (1992) suggests that national park tourism should support the economy of local communities by employing local people, using local products and services, and by supporting the skills and economic activities which are traditional in national park areas.

It can be argued that tourism is one of the major determinants of the value of national parks, but the role of tourism in expanding public support for national parks is a source of much debate (Lindberg, 1991). Some writers argue that tourists will continue to come only if national park resources remain intact, and that local people can accrue benefits only if the tourist can continue to come. A clear link might therefore be envisaged between local economic prosperity and resource protection (Healey, 1994; Hawkins, 1992).

Compensation to the local people for the land lost to create national parks, has become another issue with implications for protected areas. Munasinghe (1992) proposed that in order to compensate local people for the loss of use of nearby resources, and to obtain their collaboration in protecting national parks, a larger proportion of tourism revenues should be recycled locally. Studies have shown there is no single national park, which has (to date) recycled these benefits adequately. Against this backdrop, participants in a 1993 symposium on ecotourism and local communities, sponsored by the Rockerfeller Foundation in Bellagio Italy, found it almost impossible to cite specific national parks or reserves where tourism had successfully produced local economic benefits (Healey, 1994).

Many national parks are now experiencing a dramatic increase in visitation levels. The more people seek travel opportunities to unspoiled areas, the greater the pressure on remaining pristine areas (Lindberg, 1991). Uncontrolled mass tourism has, and continues to contribute to the degradation of many areas of natural and cultural significance, entailing the loss of biological and cultural diversity as well as important sources of income (Wood, 1992). The impacts of tourism vary according to the numbers and nature of the tourists and the characteristics of the site. Problems arise if the number of tourists is large or the resource is overused. Honey (1999) observed that, although tourism can be a lucrative source of revenue for national parks, it could also present major management problems.

Ceballos (1991) suggests that financial benefits derived from national parks tourism are of value to the resources upon which they depend only if they are used (at least in part) to maintain those very resources upon which they depend. No amount of money can protect a park unless it helps resolve root causes of environmental degradation. It is therefore being argued that, tourism is one of the major determinants of the value of national parks.

Furthermore, the growth of tourism fosters an increase in the number of facilities in national parks to cater for tourists. Income from tourism can also assist in the development and improvement of more facilities such as hotels, sanitation systems for residents and tourists alike. Such facilities may have a negative impact on the environment if not well managed (Gakahu, 1992b). Another argument is that, since investors and other concessionaires have a vested interest

in maintaining the environmental quality of tourist destinations, they are becoming increasingly interested in collaborating with those who work to protect the environment (Ceballos, 1991). Concessionaires are however, also required to make profits for shareholders. They therefore operate under the tension between making money through more and more profitable tourism and protecting the environment. This causes them to take a short-term view. The desire to permit maximum access to areas of biodiversity and natural beauty should not be the cause of negatively affecting the enjoyment of future generations by today's visitor. Our actions over the next few years will determine whether we move towards a chaotic future characterised by over-exploitation and abuse of our natural resources, or towards maintenance of diversity and the sustainable use of renewable resources (IUCN, 1992).

2.5.4 Implications for the tourism industry

Studies have shown the possibilities for people to benefit from the tourism industry (Boo, 1990; Lindberg and Hawkins, 1993; Ashley and Roe, 1998). These suggest that for all stakeholders to benefit adequately from the tourism industry, central issues that need to be addressed are how can local incomes from tourism be increased, how 'leakage' to distant cities and companies can be reduced, and how benefits, in addition to wages, can be generated for local people in order to gain their support (Honey, 1999). Healy (1994) proposed that thought should be redirected to restructuring of the tourism industry. Ceballos (1996) questioned whether this would be possible in such a well-established, sophisticated global industry. Can tourism companies be forced to employ more local people and train them, forced to buy more local goods, or to share profits? In reality, tourist companies are driven by market forces, which may not offer opportunities to restructure.

Although tourism can help to diversify risk by diversifying a household's livelihood portfolio, it is in itself a risky activity. Despite its growth, it is prone to cyclical variability and sudden downswings (Ashley and Roe, 1998). For example, foreign media coverage of violence and insecurity in the host country and natural catastrophic occurrences will divert tourists elsewhere, while a recession in the northern hemisphere affects the tourism industry as a whole. Thus, where tourism earnings are unreliable, they will continue to reinforce livelihood strategies of poor households directed to maintain flexibility and minimise risk. A good example is the recent

destruction of the World Trade Centre (WTC) on 11th September 2001, and subsequent terrorism events, which reduced travel and tourism in African countries because of tourist fears to travel. In Tanzania a majority of the international tourists, especially to the national parks, originates from USA and the General Secretary of Tanzanian Association of Tour Operators (TATO) has revealed that approximately 60% of the expected tourists in Tanzania for 2001/2002 season have cancelled their safari bookings. In addition 50 drivers and tour guides from different tour companies have lost their jobs and one of the largest tour companies in the country gave its 60 employees unpaid leave (Arusha Times, 17th Nov. 2001). During the study period (September-November 2001) there was already a 50% cancellation of mountain climbing at Kilimanjaro National Park due to concerns of the tourists to travel during this time of international tension (KINAPA booking records, 2001/2002).

Obviously, fluctuations in the tourist market can have adverse consequences for local labour, as was witnessed during the 1992 season when the publicity concerning Zimbabwe's drought led to a decline in visitor arrivals from outside the country and a consequent loss of jobs. Zimbabwe, like many other destinations, was also affected by the Gulf War crisis and witnessed a significant downswing in international tourist arrivals during this period (O'Grady, 1990).

2.6 The national parks dilemma

Many protected areas in Africa are currently under siege. Declining and inadequate funding impair resources to protect and manage national parks (Leader-Williams *et al.*, 1988). Overpopulation of certain species, such as elephants which impact on the habitats and other species (Cumming, 1990) and loss of species due to increased ecological isolation of protected populations (Soule, 1986) all contribute to the growing list of problems to be solved by standard approaches to national parks management. The crux of the issue is whether rural development has to continue to follow the path of transforming land and diminishing biodiversity or whether there are alternative paths to rural development, particularly for farmers on marginal lands. Such paths might, for example, take advantage of Africa's comparative advantage in its spectacular wildlife. Land use decisions have a direct bearing on national parks (Larsen, 1988).

Although the Ecotourism Society has increased the status of tourism by re-defining it to include the well-being of local people, there is a general feeling that the idea of improving the well-being

is too nebulous, since sometimes tourism can improve economic well-being and destroy the social well-being. It is therefore claimed that by considering the needs of local communities and incorporating their expertise in conservation planning, and by giving communities reliable and continuous economic and social interest, that park managers can minimise conflict between conservation and human survival (Lindberg, 1991). While it is understood that solutions to improve park-people relations are to be sought, experiences elsewhere have revealed signs of both success and failure.

Generally, one of the main challenges in engendering participation in conservation efforts is that local people commonly view conservation as antithetical to development (Gartlan, 1992). There have been claims that conservation of natural resources in Africa will not succeed in the long run unless people perceive those efforts as serving their economic and cultural interests (Brown and Wyckoff-Baird, 1992). This leads to our understanding that without participation and empowerment of local populations in the conservation, utilisation and regeneration of the natural resources on which they depend for their livelihoods, prospects for conservation of many unique and highly diverse ecosystems are bleak (Larsen, 1988).

The future viability of national parks in Africa appears to hinge on the co-operation and support of local people. This co-operation and support in turn depends on whether the areas can provide local communities with benefits that are sufficiently concrete for people to want to maintain the areas as national parks (Hannah, 1992; Lembuya, 1992; Wells and Brandon, 1992).

In practice, the options for local capture of tourist revenue are relatively few: national park entrance fees or tourists taxes can be distributed to local governments or community organisations; local people can operate or be employed in establishments providing lodging, food or services to the tourists; or local people can sell the tourist souvenirs, crafts or other merchandise. Some analysis of fee-sharing systems has been undertaken (Western, 1982; Lindberg, 1991). There is a large body of literature on tourism and employment creation in the lodging and tourist service sector, but only a few studies involving Third World rural areas impacted on by nature tourism (Boo, 1990; Place, 1991). Wells and Brandon (1992) offer a number of case studies of park-related communities, but little data on how they have benefited

economically (or failed to benefit) from tourism. The least-explored option for revenue capture is through sale of what might be termed tourist merchandise, that is, tangible products sold directly to tourists by local people, but still there is no adequate information concerning this important component of the tourism sector. Healey (1994) argues that as has been documented, none of these revenue-capture options has adequately met local needs.

Currently, much responsibility to support local people's livelihoods around protected areas has been left to the managers of national parks and other categories of protected areas. National parks alone cannot be expected to satisfy the development needs of local people. It has to be realised that there are other sectors related to community development including agriculture, forestry, and mining which have to take part in developing strategies to meet local people's needs in a sustainable manner that does not impair the environment. This is especially so when the areas outside of the park may be relatively large and potentially productive. In addition, parks are challenged in their management by limited allocations from the national budget and human resources to become more effective in expanding their roles in development (Wells *et al.*, 1992), if indeed they should do so. Conservation practitioners are facing increasing pressures from donors, government, local stakeholders and society as a whole to demonstrate clear and tangible development results (BSP, 1993). It has to be realised that parks can only have partial solutions to some of the community needs. Apart from these dilemmas, national parks should not use these factors and others as reason for poor performance. They should approach the challenges with more commitment and work effectively and efficiently in collaboration with other stakeholders to achieve shared goals (Lusigi, 1982b; Breen, 2002 pers. comm.). Two critical goals requiring urgent attention are to link livelihoods to parks and to develop the necessary integrated approach to managing parks in a bigger landscape. These are considered in the next chapter in the context of Tanzania's national parks in general and Mount Kilimanjaro national park in particular.

CHAPTER 3
THE STUDY AREA AND A RESEARCH FRAMEWORK

3.1 Introduction

The study area was selected based on evidence of the direct involvement of local people in formal and informal sectors related to tourism, and hence accrual of benefits that contribute to local people's livelihoods around the mountain. The disaggregation of the mountain ecosystem into sectors managed by different agencies resulted in the absence of an integrated plan and focus process for promoting sustainable use across the sectors. The chapter is presented in sections: the history of conservation in Tanzania, national parks and other categories of protected areas in Tanzania, Tanzania's policies for National Parks, Tanzania and national parks visitorship and Mount Kilimanjaro National Park (the study area). The last section develops the framework for research based on the analysis of changing paradigms (chapter 2) and the context in which KINAPA operates.

3.2 History of conservation in Tanzania

The history of Tanzania's protected area network dates back to the German period of occupation before World War 1 in 1905. During this time, Selous was declared as the first game reserve in Tanzania and its regulations were put in place. Britain took over from Germany after World War 1 in 1918, and increased the number of reserves, and created a Game Department. In 1921 Serengeti was declared as a partial game reserve and as a complete game reserve in 1929. In 1940 the first Game Ordinance was enacted. Serengeti was declared the first national park in 1951 and in the same year, 4 game reserves were established (Rungwa, Mkomazi, Mount Kilimanjaro and Mount Meru). Later in 1959, Serengeti National Park was proclaimed and the Ngorongoro Conservation Area was excised from Serengeti. In 1960 Lake Manyara National Park was gazetted (TANAPA, 1991).

After the country gained independence in 1961, the Tanzanian government continued to increase the number of national parks and other categories of protected areas. Mount Kilimanjaro Game Reserve was established in the early 1960's and declared as Mount Kilimanjaro National Park in 1973 (Government Notice No.50 of March 16, 1973) in accordance with the National Park

Ordinance, Cap 412 of 1959. The boundaries of the park were established by the Presidential Proclamation of March 8, 1973.

In September 1961, Tanzania pledged to preserve its natural resources including wildlife, flora and fauna, for posterity. At the symposium on the Conservation of Natural Resources, the first president of the United Republic of Tanzania, the late Mwalimu Julius Kambarage Nyerere, gave a speech that has become known as the Arusha Manifesto.

"The survival of our wildlife is a matter of grave concern to all of us in Africa. These wild creatures amid the wild places they inhabit are not only important as a source of wonder and inspiration but are an integral part of our natural resources and our future livelihood and well-being. In accepting the trusteeship of our wildlife, we solemnly declare that we will do everything in our power to make sure that our children's grandchildren will be able to enjoy this rich and precious inheritance. The conservation of wildlife and wild places calls for specialist knowledge, trained manpower, and money and we look to other nations to co-operate with us in this important task- the success or failure of which not only affects the continent of Africa but the rest of the world as well"

Source: TANAPA, 1993

Box 3.1 An extract from the Arusha Manifesto

The manifesto emphasises matters that are central to this study: the link between wild creatures and wild places with 'livelihoods and well-being'. Apart from the Arusha Manifesto, there are two other conventions and one manifesto, which set out the basic objectives of establishing, conserving and managing fauna and flora in their natural state for the benefit of mankind in perpetuity. The first was the London Convention signed in London 1933, and ratified by Tanzania in 1951. The second was the Convention on International Trade on Endangered Species (CITES), which restricted trade in endangered species, signed in Washington in 1973 and also ratified by Tanzania. The latest convention is the Rio Summit in 1992 (Agenda 21, 1992). All these have provided the basis for the way wildlife conservation has been managed and the influence that it has on local livelihoods in Tanzania (Loibooki, 1997).

3.3 National parks and other categories of protected areas in Tanzania

Located in Eastern Africa on the Indian Ocean, Tanzania is noted for its biological diversity and extensive system of protected areas featuring savanna grassland ecosystems[1] in the central areas, and tropical moist ecosystems in the northern mountains, along the coast and in the south (Mwamfupe, 1998). Tanzania National Parks are important national resources contributing substantially to the Gross National Product (GNP), employment, research, recreation, training and foreign exchange earnings. Tanzania covers an area of about 950,000 square kilometres (which is almost equivalent to the combined territories of France and Germany) consisting of about 26 regions[2] (Kiss, 1990). It has a remarkable diversity of ecosystems, supporting an abundance of wildlife. A quarter of the land surface is included in a network of protected areas comprising 41,036 square kilometres of national parks (17%), 96,000 square kilometres of game reserves (41%), 8,292 square kilometres of Ngorongoro Conservation Area Authority (3%) and 90,000 square kilometres of game controlled areas (39% IUCN category I-V; Table 3.1). In addition, there are also other areas with defined conservation status but not included in the above 25% of the Tanzania land area. These include 1 marine park, 7 marine reserves, 3 zoos/game sanctuaries and 6 game farms (Mbaruka, 1996). With such a high proportion of land designated for conservation it will be essential that it is perceived to contribute meaningfully to livelihoods and the well being of citizens as is the case of Mount Kilimanjaro National Park.

Since the 1970's, Tanzania's protected areas have come under increasing threat from a combination of human activities. While natural forces such as prolonged drought have been identified as major causes of environmental degradation, there is also a growing realisation that the population dynamics of the surrounding settlements have had adverse impacts on protected areas. The major population issue is migration, which has dramatic short-term impacts on the environment (Mwamfupe, 1998).

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[1] Ecosystem is defined as a system involving the interactions between a community and its non-living environment

[2] A region in the Republic of Tanzania is equivalent to a province in other countries, such as are found in the Republic of South Africa.

Table 3.1 Tanzania Protected Area management categories

Management category	Number	Total area km^2	Percentage
National Parks	12	39,172	17
Ngorongoro Conservation Area	1	8,292	3
Game Reserves	18	95,832	41
Game Controlled Areas	56	90,000	39
Total Protected Areas	87	233,296	100

Source: Loibooki, 1997

In Tanzania, national parks are managed by Tanzania National Parks, which is a parastatal organisation with a mandate to manage the 12 areas designated as national parks. These are relatively large areas created, managed and controlled through the National Parks Ordinance CAP 412 of 1959, and declared by an Act of the parliament. They contain representative examples of major natural regions, features or scenery where plants and animal species, geo-morphological sites and habitats are of special scientific, educational and recreational interest (TCP, 1997). The present objectives of TANAPA are presented in Box 3.2.

- To protect outstanding biological resources and manage them for tourism, education and research.
- To ensure a quality visitor experience, rather than emphasising mass- tourism at the expense of the park resources and value.
- Ensure optimal levels of revenue and benefits accrue to the national economy, the parks, and communities living adjacent to the park, without impairing parks resources.

Source: TANAPA, 1994

Box 3.2 Tanzania National Parks objectives

Noteworthy is that, the third objective clearly links park operations with the livelihoods of people living adjacent to the park, which idea is the focus of this study.

TANAPA does not consider strategies and actions only within park boundaries, but they work co-operatively with surrounding communities also. Local and district governments, other agencies and departments of the government, organisations, and individuals help to ensure that actions outside the parks do not impair park resources and values (TANAPA, 1994).

The national parks network covers a significant land area of the country and hosts one of the greatest diversity and numbers of large mammals in the world (TCP, 1997). Among 12 parks, 3 are considered to be in the first category of IUCN, these include Mount Kilimanjaro, Serengeti, and Lake Manyara.

Lake Manyara and Serengeti are Biosphere Reserves[2] whilst Mount Kilimanjaro National Park and Serengeti are designated as World Heritage Sites[3]. The World Heritage Sites and Biosphere Reserves are indicated in Table 3.2.

Table 3.2 World Heritage Site and Biosphere Reserve status of protected areas in Tanzania
The relevance of a biosphere reserve and world heritage sites for livelihoods is the consideration of human activities adjacent to protected areas and their compatibility with ecological sustainability. Noteworthy for this study is that Mount Kilimanjaro National Park is not associated with a Biosphere Reserve.

Protected Area and Category	Year	Status
Mount Kilimanjaro National Park	1989	World Heritage Site
Serengeti National Park	1981	World Heritage Site
Serengeti National Park	1981	Biosphere Reserve
Manyara National Park	1980	Biosphere Reserve
Ngororngoro Conservation Area	1981	Biosphere Reserve
Ngororngoro Conservation Area	1979	World Heritage Site
Selous Game Reserve	1980	Biosphere Reserve
Selous Game Reserve	1982	World Heritage Site

Source: TANAPA, 1993

3.4 Tanzanian national policy for national parks

In 1994 TANAPA developed the first national policies for national parks in Tanzania. The formulation of these policies was to provide direction on how to accomplish the mandate[4] of

[2] Biosphere Reserves were criteria established by UNESCO's Man and Biosphere (MAB) in 1971. They are designated to be models demonstrating the compatibility of conservation efforts and sustainable development. The concept places an emphasis on scientific research, and international co-operation, educating and training local people in ecological concepts and developing sustainable human activities (TANAPA, 1991-1995).

[3] World Heritage Sites are governed by the Convention concerning the protection of the Worlds Cultural and Natural Heritage. This was adopted by the General Conference of UNESCO in 1972 and aims at safe guarding monuments, sites of natural areas, which are of outstanding universal value. Tanzania became a party of the convention on 2. 8. 1977 (TANAPA, 1991-1995).

national parks in the country (TANAPA, 1994). The policies recognise that all national parks are complex mixtures of values and resources, each park having unique qualities and purposes, requiring specific treatment in development and implementation of management plans, strategies and operational systems (*ibid.*). The policy statement on the TANAPA mandate is quoted below:

> To manage and regulate the uses of areas designated as national parks by such means and measures to preserve the country's heritage; encompassing natural and cultural resources, both tangible and intangible resource values; including fauna and flora, wildlife and habitat, natural processes, wilderness quality and scenery therein and to **provide for human benefit and enjoyment** of the same in such manner and by such means as will leave them unimpaired for future generation.
>
> *Source: TANAPA, 1994*

Box 3.3 The Tanzania National Parks mandate

Of interest here is the distinction between human benefits and enjoyment, as this provides cause for envisaging the park as providing for, amongst others, benefits other than those found through enjoyment. Improving the livelihoods of local people is one such benefit.

The mandate encouraged TANAPA to secure the involvement of local people in conservation issues. This led to the establishment of outreach programmes, particularly the extension and benefit sharing programme (Community Conservation Services - CCS), which was accompanied by mechanisms to ensure that benefits of conservation are shared with local communities surrounding the national parks. The Tanzania National Parks CCS objectives are shown in Box 3.4.

- To improve relations between individual parks and local communities
- To ensure that the interests of TANAPA with regard to natural resource conservation and community welfare are represented at all levels
- To facilitate the planned sharing of benefits to CCS target communities
- To assist communities to gain access to information, resources and services that promote sustainable development

Source: TANAPA, 1994

Box 3.4 TANAPA Community Conservation Services objectives

[4] The term mandate is defined as an official or authoritative instruction or command/ to delegate authority.

The sharing of benefits covers such things as infrastructure and services, cash or in-kind contributions to locally initiated development projects, and assistance in setting up sustainable income generating enterprises based on non-park natural resources. TANAPA envisages working together with other organisations and individuals and local government to secure the survival of the national parks and promote a sustainable improvement of the livelihoods of local people (TANAPA, 1994).

The TANAPA integrated planning process, and continuous evaluation and monitoring means that TANAPA is moving towards achieving the delicate balance between preservation and use. Since the establishment of the Planning Unit within TANAPA, 7 out of 12 parks have developed General Management Plans (GMP) or Management Zone Plans (MZP) accompanied by Environmental Impact Assessment (EIA) documents (TANAPA, CP, 1998). These documents have provided direction for the national parks in accomplishing their management objectives. Individual parks have developed their annual operational/action plans that further enable each department to develop performance budgets for every fiscal year. The KINAPA GMP was formulated in 1993 to address emerging problems and management concerns related to tourist use and development, and park management of natural and cultural resources. The GMP also provides a clear brief for KINAPA collaboration in improving the welfare of local people.

3.5 Tanzania and Tanzanian National Parks' visitorship

Most non-consumptive tourism occurs in national parks, while consumptive tourism, mainly in the form of hunting, occurs in game reserves and game controlled areas (Curry, 1990). Tanzania has considerable tourism potential that has shown a remarkable annual growth rate. Over the last decade, the country has registered an average growth of 6% per annum in tourism and in the seven years since 1990 tourist arrivals to Tanzania increased at an average annual growth rate of 13%, from 153,000 tourists in 1990 to 359, 096 tourists in 1997. In the same year, tourism contributed 16% to the Gross Domestic Product (GDP) (US$ 2,263 million), and 54% of the country's export earnings (US$ 717.7 million). It also provided employment for more than 30,000 people (National Tourism Policy, 1999). By the year 2000 Tanzania was expected to have received 500,000 tourists (MNRT, 1998). The picture was even more encouraging as regards tourism receipts with an average annual growth rate of 30%. In 1990 tourism receipts were US$

65 million and US$ 392.41 million in 1997. The country expected to earn US$ 1,000 million by the year 2000 (MNRT, 1998).

Visitors entering national parks have gradually increased in the 10 years between 1989-1999. During this time the growth was about 106%, increasing from 177, 906 tourists in 1989, to 367,022 tourists in 1999 (TANAPA, 2000).

Revenues accruing to TANAPA are related to by visitor days spent in the park rather than to visitor numbers. For instance, Serengeti received a total of 968,062 visitors between the year 1989 and 1999 (Table 3.3), and the average was two visitor days spent in the park. Unlike Serengeti, however, KINAPA received more revenue despite its lower visitor numbers within the same period (TANAPA, 2000). The reason is that visitors spend about 6 days for mountain climbing and therefore more camping and hut fees are generated from visitors. This shows that although KINAPA ranks fifth in tourist numbers (Table 3.3), it is the number one revenue earner within the national parks system of Tanzania (TANAPA, 2001).

Unlike other national parks where visitors may drive themselves for game viewing and photographing, at KINAPA visitors have to have a guide and porters, which means more employment for the people.

Table 3.3 Tanzania National Parks visitor statistics 1989-1999

National park	Visitor Numbers		Total	Percentage	Revenue
	Residents	Non Residents			US$
Serengeti	444,801	523,261	968,062	40	27,664,898
Manyara	177,596	431,296	608,892	25	9,287,097
Tarangire	135,732	215,593	351,325	14	8,415,822
Arusha	73,562	89,046	162,608	7	3,156,520
Kilimanjaro	7,908	138,734	146,642	6	**31,890,313**
Mikumi	94,057	45,436	139,493	6	1,275,005
Ruaha	24,977	18,256	43,233	2	973,139
Gombe	2,277	5,848	8,125	0.3	559,154
Katavi	2,857	1,184	4,041	0.2	123,377
Mahale	512	2,034	2,546	0.1	355,261
Udzungwa	591	1,906	2,497	0.1	44,198
Rubondo	495	1,193	1,688	0.1	137,996
Total	965,365	1,473,787	2,439,152	100%	78,882,776

Source: TANAPA, 2000

3.6 Mount Kilimanjaro National Park

Location

Mount Kilimanjaro National Park comprises an area of some 756 square kilometres. The mountain is the highest in Africa and one of the world's largest freestanding mountains, rising to 5,985m.a.s.l.. It is located in Tanzania about 330 kilometres south of equator, on the northern border with Kenya between latitudes 2°50' and 3°10' south and between longitudes 37°20' and 37°40' east. An outstanding features is the extinct volcano Shira, 3,962 meters (13,000ft) in the west, and two dormant volcanoes Mawenzi, 5,149 meters (15,893ft) in the east and the snow capped Kibo (Uhuru Peak) 5,895 meters (19,340ft) above sea level in the middle. The largest town in the area is Moshi, which can be reached by road or rail or by flying into Kilimanjaro International Airport, about 45 kilometres away. Hotels, Tour Operators, and services for climbing the mountain are provided in the towns of Moshi, Marangu and Arusha (TANAPA, 1993; TANAPA, 2001; Figures 3.1 and 3.2).

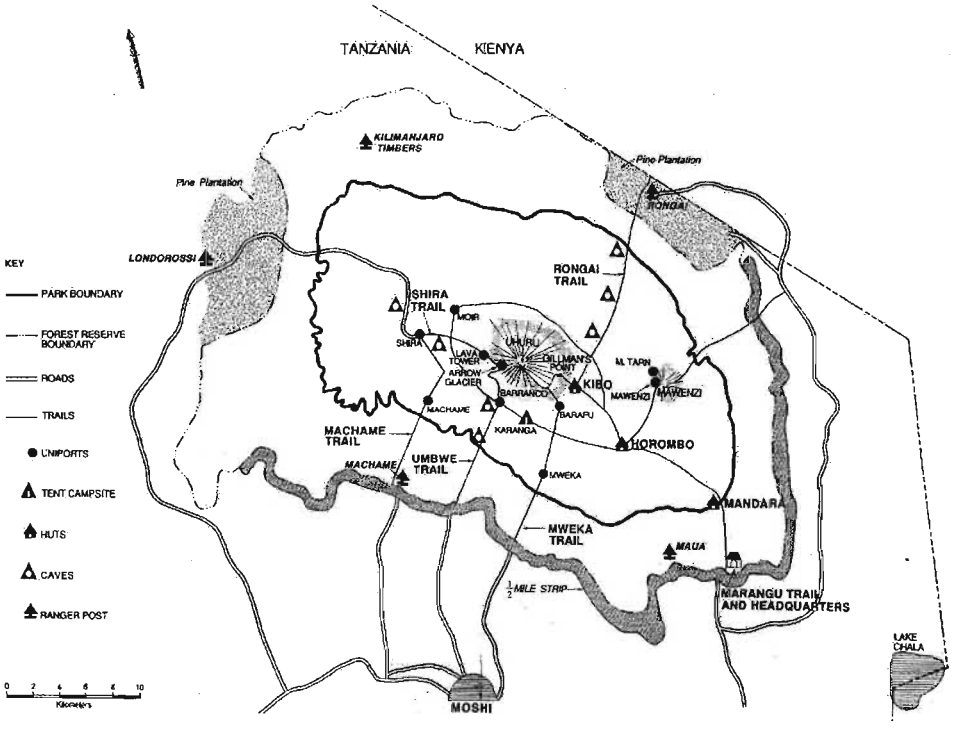
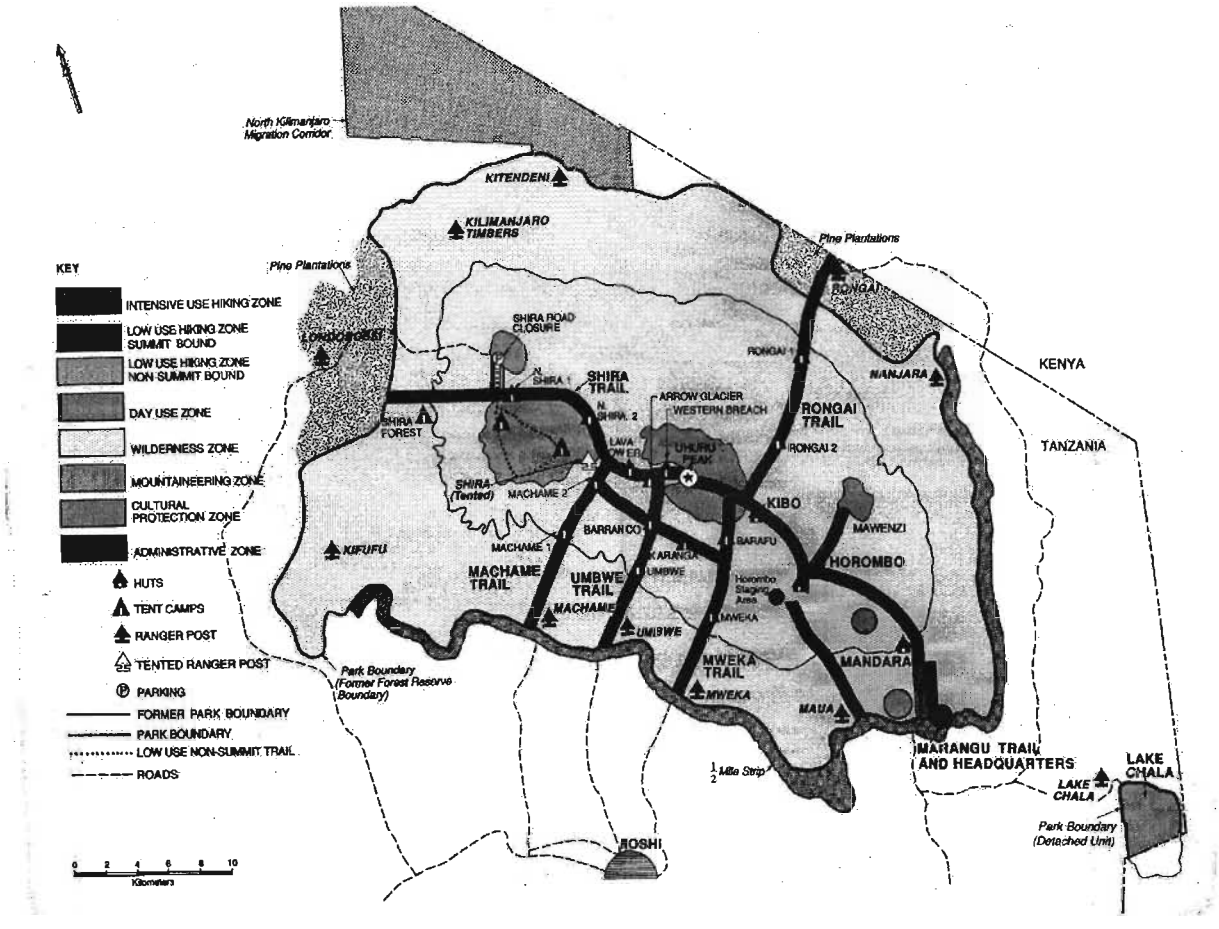


Figure 3.1 Mount Kilimanjaro National Park location

Kilimanjaro Mountain is a natural focal point for East Africa with an ecological influence on the adjacent areas in terms of hydrology, montane forest that acts as a water catchment for the down slope areas, and in terms of its high biodiversity of fauna and flora (TTB, 1998). The mountain is also a focal point for tourism because of its dominance over the surrounding plain and consequent high scenic value (Misana, 1991).



Source: TANAPA, 1993

Figure 3.2 Mount Kilimanjaro National Park vicinity map

3.6.1 A brief human history of Mount Kilimanjaro

Stone bowls and rings made from local lava have been found on the western slopes of Kilimanjaro along with obsidian flakes and tools, pottery fragments and a stone axe. Similar stone bowls from elsewhere have been dated as being more than 2,000 years old. Most of the artefacts found on Kilimanjaro are more recent and can be traced to the Wachagga people who migrated into the area some 250 or more years ago. The Wachagga were agriculturists and they

settled down to farm on Kilimanjaro's slopes, using the abundant water from the forest catchment, making dams and irrigation furrows, building forts and in many ways leaving their mark on the landscape (TANAPA, 1992).

While African people have known and used Kilimanjaro for many years, the first recorded references to the mountain were made by foreigners. Oddly enough, even though Kilimanjaro is huge and close enough to the trading caravan routes to be a key landmark for outsiders, there seem to be very few historical records. Ptolemy, an Alexandrian geographer and astronomer, wrote the first published account of Kilimanjaro's snow mountain some 18 centuries ago (TANAPA, 1992). In the last decade of the 19th century, German colonisation began to make its mark on Kilimanjaro. Johann Rebmann, a Christian missionary, is credited with bringing Kilimanjaro to the attention of Europe when his account of a snow-capped mountain near the equator was published in 1849. After several attempts by various people to explore, map or climb to the summit, Hans Meyer finally reached Kilimanjaro's highest peak in 1889 (The Ice Cap, 2000).

The Wachagga people, who are the dominant tribe on the lower slopes of the mountain, worship and perform ritual ceremonies on the mountain at places such as Kifinika hill near Maundi crater. These ceremonies are conducted especially during the drought periods, when they pray and give sacrifices so that God can release the rains. Currently, most of the local people still worship the mountain as their rain provider.

3.6.2 Purposes of KINAPA establishment

In 1957 the Tanganyika National Parks Authorities, with support from many local and international conservation organisations, proposed the establishment of a national park surrounding and including Mount Kilimanjaro. The boundaries of the park were established by the Presidential Proclamation of March 8, 1973 and the park was officially opened for visitation in 1977 (KINAPA office files). Notwithstanding the proposal by Tanganyika National Parks agency that the surroundings would also be a part of the national park, the area designated was only that part above the 2700m.a.s.l.. In effect, the mountain ecosystem became divided into sectors under administration by different government departments. The purpose of establishing KINAPA as presented in the GMP for the park, which was developed in 1993, is shown in Box 3.5.

Two matters of particular interest to this study arise from the statement of the purpose of establishing the park. Firstly, there is a very strong emphasis on the mountain as a whole; not just that part of the mountain under the jurisdiction of TANAPA; and secondly, the absence of specific mention of an intention to contribute to local livelihoods and well-being, although these are addressed in the GMP (Box 3.5).

- To protect Africa's highest and one of the world's largest freestanding mountains.
- To protect and interpret one of the world's best-known and most recognisable geologic features.
- To conserve an area of exceptional natural and scenic beauty
- To conserve the unique ecological ranges and features of this fragile mountain ecosystem.
- To protect the habitat for threatened, endangered, endemic and rare species
- To protect the mountain's vital function as a watershed

Source: TANAPA, 1993

Box 3.5 KINAPA establishment purposes

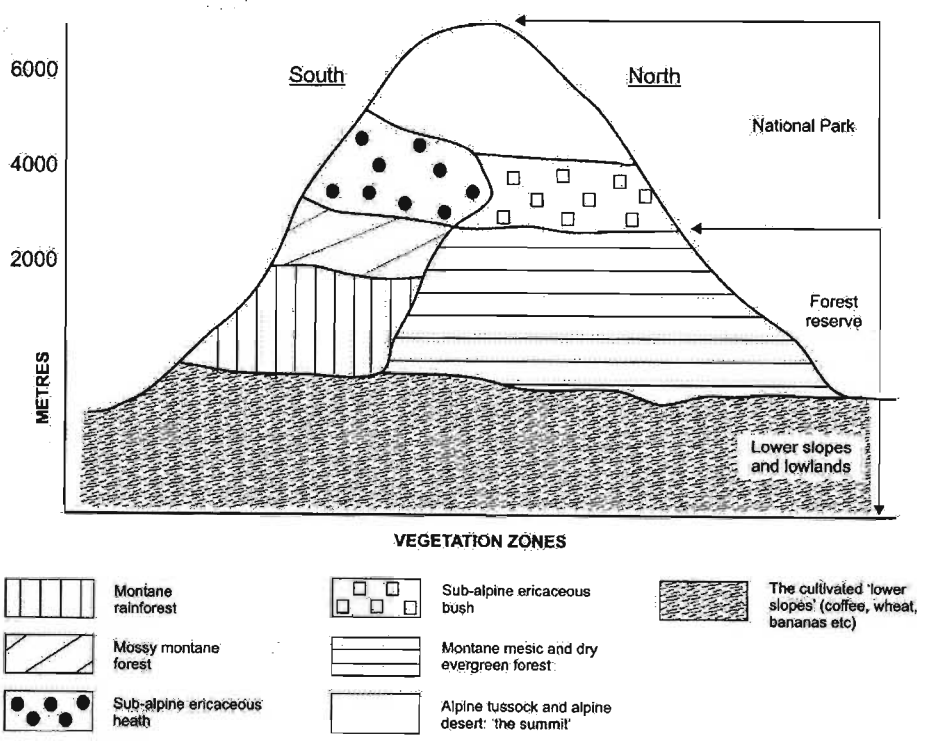
Climatic conditions

The climate varies with elevation and aspect of the mountain. Generally, rainfall increases with altitude. Most places on the mountain experience their maximum rainfall in March to May and their minimum from July through to September. Moisture deficits normally occur in lowlands from September to March (Misana, 1991). The climatic conditions are attributed to the altitude and strongly influence the vegetation, animal life and the climbing conditions. Due to favourable climatic conditions, many of the lower slopes of the mountain have been settled and cultivated, mainly with coffee as a cash crop, mixed with banana plantations and a variety of vegetables.

The relatively abundant precipitation (mean annual precipitation 1230 mm.) and fertile soils have been very important in attracting farmers for the last 2000 years (Schmidt, 1989). On the adjoining low land areas maize, beans and finger millet are the major crops grown. Cultivation activities cater for food, while cash crops are sold to support household livelihoods during the periods of drought. There are also individual and national coffee, wheat, potato, and sugar cane estates on the low lands especially on the western side of the mountain (Gamassa, 1991).

Flora

Rainfall, temperature and soils primarily determine the vegetation of Mount Kilimanjaro. The Mount Kilimanjaro ecosystem comprises seven ecological/ climatic zones. Each zone occupies a belt of about 1,000 meters (3,300 ft.) in altitude and is characterised by changing rainfall, temperatures, plants, and animal life. The ecosystem of Mountain Kilimanjaro is reflected in a spatial succession of distinct vegetation zones. Each zone is characterised by plants best adapted to the environmental conditions occurring at that altitude, particularly temperatures and rainfall. The zones include the transformed cultivated zone on the lower slopes (coffee, wheat, banana etc.), the montane rain forest, the mossy montane rainforest, the montane mesic and dry evergreen forest, montane mesic, the sub-alpine ericaceous heath, the sub-alpine ericaceous bush, and the alpine tussock and alpine desert below the snow-capped summit. Not all of these formations are found in the national park. Kilimanjaro National Park includes the only area in Tanzania above the 2,700-meter contour (9,000ft) that includes the sub-alpine ericaceous heath, sub-alpine ericaceous bush, alpine tussock and alpine desert (TANAPA, 1993; Figure 3.3).



Source: TANAPA, 2001

Figure 3.3 KINAPA vegetation zones (not to scale)

Fauna

Mount Kilimanjaro harbours large wildlife populations. Some examples include elephant, buffalo, Abbott duiker, bushbuck, baboon, black and white colubus monkey, bush pig, eland, giraffe and squirrel. There is also a diversity of important bird species that migrate between four parks namely Amboseli, Tsavo, Arusha and Kilimanjaro. As human settlements and agricultural activities have expanded over time, much of the wildlife that was formerly found along the slopes and the lowlands of the mountain has disappeared because of habitat destruction. Today, little wildlife is found on the northern side of the mountain (Newmark, 1991). The harvesting pressure exerted on the area by local people and their demands for resources to meet their livelihoods needs, has been evident for some years. This situation requires the attention of the responsible authorities in order to re-establish sustainable livelihoods based on consumptive and non-consumptive use of the resource base.

The glaciers

Studies have shown that the glaciers and ice fields of Mount Kilimanjaro are in fast retreat. The ice cap atop Mount Kilimanjaro is retreating at such a pace that it may disappear in less than 15 years (The Ice Cap, 2000). Among the three peaks of the mountain, only Kibo still retains glaciers. Mawenzi has patches of semi permanent ice and Shira shows evidence of past glaciations. A study conducted on Mount Kilimanjaro by Hasterireth and other researchers in 1997 suggested that 70% of the ice area on top of the mountain disappeared between 1912 and 1989 (TANAPA, 2001). The prediction is that by the year 2030 there may be no glaciers on Mount Kilimanjaro if global warming is not reversed. The measurements taken by Lonnie in 2000 reveal that the mountain glaciers are not only retreating, but also rapidly thinning (Revkin, 2001). Given that the retreat started a century ago, it is believed that natural changes were affecting the glacier before it felt any effect of warming caused by the recent rise in carbon dioxide and other heat trapping greenhouse gases from smoke stacks and motor exhausts. These findings support the study by Thomson, (2000).

The Kibo glaciers overlying granite are a major attraction of the mountain. They are visible from hundreds of kilometres away, extending upwards towards the blue sky of tropical Africa. The

glaciers at Kibo are all that is left of the glacier ice sheets that once covered the whole mountain top.

The hydrological and climatological regulating functions of the mountain and associated glaciers are important in this study because they are in a phase of regressive evolution in the sense that they provide less and less adequately for the livelihood needs of people. There is a perception that visitors come to climb the mountain because they are attracted by the glaciers covering the mountain peak. This implies that if the glaciers disappear, fewer visitors may come, and this will have a negative effect on the sustainability of the park and of the livelihoods of local people. There will be less revenue to the park and therefore less support for local development projects.

3.7 Mount Kilimanjaro as a resource for local people

Land, water and other resources on mount Kilimanjaro have been utilised for over a century and a half, and residents have achieved as a result, a relatively high standard of living (Maro, 1988). However, this has been accompanied by a dramatic change in land use beyond what was established as a forest reserve during the last 100 years (O'Kting'ati and Kessy, 1991). The population of Mount Kilimanjaro is concentrated at an altitude of between 900m and 1800m with the highest densities occurring between 1100m and 1800m (Gamassa, 1991). According to the 1988 national census, the population of districts immediately adjacent to Mount Kilimanjaro, which include Moshi rural, Monduli, Hai, and Rombo, was 840,386. Projected population for the year 2000 in these areas was 1, 134, 877 (Kilimanjaro Socio-economic Profile, 1998, cit. in TANAPA, 2001).

Over the years, change is evident in respect of population size, density and livelihood strategies (Mwamfupe, 1998). The increase (Figure 3.4), a phenomenon of the last 60 to 100 years, (Newmark, 1991) has led to increased demand for resources such as land for cultivation and grazing, fuel wood and other forest products. This is leading to deterioration and depletion of the natural resources, resulting in encroachment, deforestation, overgrazing, soil erosion, siltation, flooding and species extinction (Mwamfupe, 1998). There have also been social implications of species and biodiversity degradation (Rees, 1985). Much of the land on the mountain was transformed either by European colonialists or the central government between the turn of the

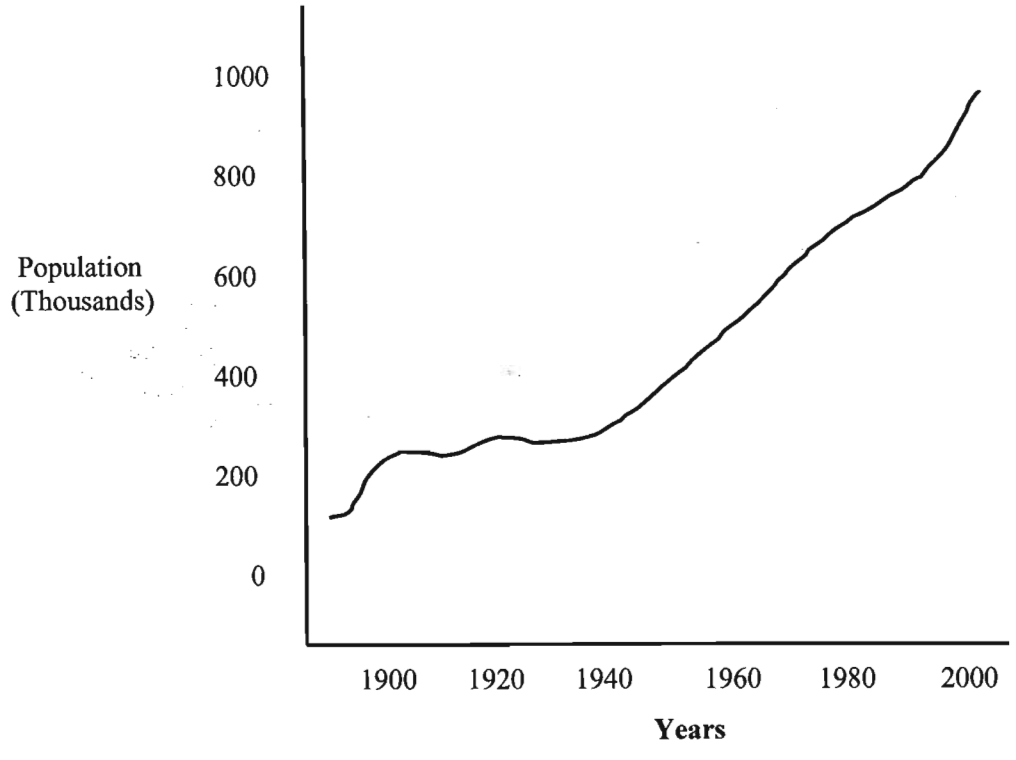
century and the 1950's (Gamassa, 1991). The establishment of the forest reserve and the large coffee estates restricted use by the local people particularly on the southern slopes of Mount Kilimanjaro. This compressed the traditional resource base and even after independence, there was no major land reform undertaken to favour the compressed and marginalized smallholder farmers (Ibid).

Agriculture and settlements on the mountain's lower slopes have replaced the natural vegetation in what used to be a montane forest (Newmark, 1991). The original montane forest has been cut and a very large proportion of the forest today consists of secondary vegetation (Wood, 1965). A major factor responsible for the environmental deterioration on the lower slopes of the mountain outside the park, is attributed to inequality in access to natural resources particularly land, to commercialisation of natural resources, to a breakdown of traditional resource management systems, and geographic and climatic factors (Rupetto and Holmes, 1993).

The introduction of cash crops such as coffee, sugar cane, as well as cattle ranching, along with commercial logging during the colonial period, placed pressures on the natural resource base. Additionally, in many places on the mountain, traditional mixed cropping practices (e.g. coffee, bananas, taro) which are considered to be able to conserve the soils and nutrients, were displaced by monocultures (e.g. maize) which are poor for soil conservation, and which need external nutrients in the form of inorganic fertilisers (Lamprey *et al.*, 1991).

The forest reserve buffers KINAPA from settlements which have a high human population density, estimated at 500 people per square kilometre (Tume Ya Mipango, 1998). Virtually, all major problems facing national parks world-wide have human dimensions (BSP, 1993). Currently, the most common problems confronting KINAPA protection managers are poaching, illegal gathering of wood and building materials, honey gathering, fodder collection, snaring of animals, illegal *'chang'aa'* brewing, marijuana cultivation, medicinal plant collection, livestock grazing, wildfire setting and human encroachment. All of these problems involve people and most frequently involve local people (Newmark and Leonard, 1991). The Montane Forest Reserve is facing a serious threat as it is being damaged, degraded and reduced at an alarming rate due to the many illegal human activities taking place within it (TANAPA, 2001). As human

population, settlement and agricultural activities have expanded over time, much of the wildlife that was formerly found along lower slopes of Mount Kilimanjaro has disappeared consequent upon habitat destruction (Newmark *et al.*, 1991). Habitat destruction and modification of the land cover for human use includes not only outright destruction or transformation but also reduction and fragmentation of habitats that reduces the complexity of an ecosystem.



Source: Newmark, 1991

Figure 3.4 Population change around Mount Kilimanjaro from between 1913 and 1990.

Given that the area is one of the most agriculturally productive areas in the country and that the mountain offers unique resource development and conservation possibilities, it is important to maintain the valuable natural resource base for the economic progress of the local people, the region and the entire country (Maro, 1988).

In the course of pursuing its policy objectives, TANAPA has identified Mount Meru and Kilimanjaro Catchment Forests as areas to be annexed to Arusha and Kilimanjaro National Parks

respectively. The reason for the annexation is to prevent the overexploitation of natural resources (TANAPA, 2001). This receives some support from willing communities living adjacent to KINAPA, who are aware of the need for conservation and who benefit from it. They have recommended to the government for the annexation of the Mount Kilimanjaro Forest Reserve and Mount Meru Catchment Forest Reserve to KINAPA and Arusha National Park (ANAPA) (*ibid.*). Motivation in government is based on the appreciation of the socio-economic value of Mount Kilimanjaro in terms of tourism, agriculture and forestry. Watershed management will be maintained and improved if the catchment forest is offered proper protection. Currently, a comprehensive report to justify the catchment forests' annexation has been submitted by the Tanzania National Parks authorities to the Ministry of Natural Resources and Tourism (MNRT) for approval and implementation. (TANAPA, 2001; Melamari, 2001 pers. comm.).

The conservation policy of Mount Kilimanjaro is taking seriously the increasing requirements of the local people for food, fuel, and timber as well as the limits of the ecological capacity of the mountain to continue to provide these products (Newmark, 1991). The intention is to improve the quality of human life through the rational, efficient and sustainable utilisation of available resources for present and future generations (Misana, 1991; Massawe, 2001). The success of efforts to sustain and enhance local livelihoods along with conservation of Mount Kilimanjaro will depend upon the active participation and co-operation among park authorities, local people, the government and the international community. Against this background the formation of an integrated management and conservation programme for all stakeholders for Kilimanjaro is an imperative.

3.7.1 Visitors

Tourism, although not well developed in Tanzania, and especially in the study area (KINAPA), is regarded as one of the most effective ways of earning foreign exchange for Tanzania's economic and social development at a national and local level (MNRT, 1998). Mount Kilimanjaro National Park is among the twelve parks forming the Tanzania National Parks system. As well as its unique resources, it is also a focal point for tourism because of its high scenic value (Misana,

1991). Non- consumptive[2] use by tourism is the sole source of revenue to the park. There has been a steady increase in the number of tourists and therefore revenue accruing to the organisation and the nation as a whole. Virtually all tourists who visit the park come to climb the mountain. In 2001 KINAPA served about 25,000 tourists *(who paid about 8.2 million US$)* from different parts of the world. This contribution is mainly from summit bound visitors. The number of people attempting to reach the summit has increased steadily from 11,533 visitors in 1989 to about 25,000 visitors in 2001 (Table 3.4).

TANAPA does not receive any subsidies from the central government and instead is required by law to pay corporate tax to the treasury. TANAPA revenue base is generated mainly from Kilimanjaro, Serengeti, Lake Manyara and Tarangire National Parks, and the revenue which is centrally controlled is allocated to manage all the parks including the head office in Arusha, according to their performance budgets. Mount Kilimanjaro National Park has the opportunity to make more money through diversifying wilderness experiences, but there is lack of capital investment to develop such opportunities. Although there are twelve national parks in the country, not all of them are well-established for visitation and therefore cannot earn income to cater for their operations. Yet they have to be protected against illegal activities, and staff have to be paid salaries.

The mountain, which includes the national park surrounded by the forest reserve, does not offer people rights for hunting therefore, the park contribution to the local economy is limited to tourism revenues from the park, which is mainly from international tourists.

KINAPA earns 38% foreign exchange of the Tanzania National Parks revenue (TANAPA, 2001). Between 1989 and 2001, 94% of visitors in KINAPA were international tourists (191,388) and only 6% were residents 12,587 (Chapter 3, Table 3.4). This indicates local visitation is low (TANAPA QR, 2001). Currently, KINAPA is making efforts through its outreach programme towards encouraging indigenous people interested in nature, to visit and learn about the park. In addition to the facilities provided for school, educational and local organised groups, the park

[2] Whilst it is appreciated that the tourists use resources such as wood and water, here 'non-consumptive' is used to indicate that the underlying intention of tourists is often to experience the environment, e.g. sense of place and game viewing which are by their very nature non-consumptive.

entrance and climbing fees for residents has been kept low to encourage and enable local communities to enter, visit, enjoy and learn about their mountain (TANAPA CP, 2001). Despite all the efforts, very few local people are able to visit the park. Most of those who visit are affluent local people, or come from outside the Kilimanjaro Region. There is a realisation that local tourism is a new concept emerging in Tanzania, which requires government efforts along with those of relevant institutions such as TANAPA to promote it.

Table 3.4 Kilimanjaro National Park visitor statistics

YEARS	RESIDENTS	TX	NON-RES.	TOTAL	EXCHANGE RATES	REVENUE	
						TAS	US$
1989	2,410		9,123	11,533	135.5	136,312,178	1,005,994
1990	1,079		11,113	12,192	170.57	133,917,109	785,115
1991	1,154		10,567	11,721	198.83	361,780,241	1,819,546
1992	879		11,151	12,030	228.47	372,683,104	1,631,212
1993	952		10,159	11,111	329.5	637,371,996	1,934,361
1994	1,011		12,699	13,710	466,59	1,087,449,000	2,330,631
1995	548	613	11,806	12,967	526.6	1,857,933,000	3,228,168
1996	301		14,068	14,369	597.43	2,188,750,000	3,663,609
1997	415		17,912	18,110	592.25	2,904,128,902	4,903,553
1998	580		17,695	18,275	645	3,588,317,000	5,563,282
1999	989		20,951	21,940	728.37	4,394,268,000	6,030,830
2000	674		20,351	21,025	798	6,020,897,000	7,544,983
2001	982		23,793	24,775	875	7,144,327,000	8,164,945
Total	12,587		191,388	203,975			
%	6%		94%			30,828,134,530	48,606,299

Source: TANAPA Quarterly Report, 2001

3.7.2 The porters and guides

The work of guiding and portering is believed to have begun at KINAPA in 1927 when 3 tourists, namely Sheila MacDonald (the first woman to climb Kilimanjaro), Major Lennox- Browne and William Scipper visited the mountain: "we asked for about a dozen of porters from Marangu village headman namely Mlang'a who then detailed off 14 people to accompany us" (The Ice Cap, 2000: 11).

Although not explicitly stated in the purpose of establishment of Mount Kilimanjaro National Park, one of the management objectives of the park is to convey to a majority of visitors an understanding of Mount Kilimanjaro as a national, regional and internationally significant

resource before and during the climb, so that the climb becomes more than just a recreational experience (TANAPA, 1993). This objective is to be achieved largely through the actions of the guides and porters who have the most immediate and prolonged contact with the tourists. Achievement of this objective requires that porters and guides be well informed and have communication skills. In essence, one would expect them to have professional training.

Normally a visitor stays in the park for between five and eight days, depending on what route is used. Tourists travel in parties accompanied by local people acting as porters and guides. A senior guide who is in charge of getting tourists safely up and down the mountain, organises a team of assistant guides and porters who accompanies the climbers. Customarily mountain climbers (tourists) discuss aspects of climbing arrangements and tipping levels with the guides and porters before they climb.

Source: KINAPA

Plate 3.1 Guides and porters preparing for mountain climb

The Wachagga people became guides and porters through their families, who historically worked on the mountain. They did not climb the mountain traditionally, but they were the first people to

be exposed to climbers, and hence they had an advantage over those from other areas (Moirana, 2001 pers. comm.).

Park regulations require that all visitors have a guide to take them up and down the mountain. Porters, mainly of the local Wachagga tribe, are used to carry heavy loads of supplies, arrange tents on some routes, and to cook meals for tourists. Most tour operators and hoteliers do not provide guides and porters with proper equipment and mountain gear although the park authorities require tour operators to provide warm clothes, shoes and equipment; and on some trails e.g. the low use hiking zone, they have to provide lightweight tents (TANAPA, 1993). Notwithstanding this requirement, the tour operators do not do so. This implies negligence by tour operators, but KINAPA has yet to establish procedures that will prevent operators from operating on the mountain if they do not adhere to the park rules. Failure to ensure proper training and outfitting, places the tourists at risk with potential repercussion for KINAPA and tour operators.

3.7.3 Community Conservation Services (CCS)

Community Conservation Services is defined as a strategy for the attainment of conservation objectives, which is based on the inclusion of local people's needs and aspirations (Bergin, 1996; Emerton, 2001). KINAPA strives to secure the integrity of biodiversity by fostering positive and supportive perceptions among local people through education and infrastructural development. The objectives of KINAPA CCS are set out below.

- To create awareness of conservation in local communities surrounding the park so that they support the preservation of the mountain and its resources.
- To provide opportunities for resident nationals to enjoy the park through park visits.
- To ensure that the local communities derive benefits through KINAPA benefit sharing scheme
- Work with local communities to help them attain the community developmental conservation goals
- To heighten visitors and local communities awareness about the interrelationship between people and their environment and encourage a higher level of personal responsibility.

Source: TANAPA, 1998

Box 3.6 Objectives of KINAPA Community Conservation Services

Expenditures on CCS have increased over years. Villages have been assisted in projects including village schools, hospitals and clinics, building bridges, water projects, roads and many other projects that lead into improving their well-being (Moirana, 2001, pers. comm.; Table 3.5). Part of the money accrued from tourism by the park is budgeted for community projects. This demonstrates how tourism on Mount Kilimanjaro can act as a source of finance for the improvement of essential services for local people.

Table 3.5 Community Conservation Services Projects supported by KINAPA in 2001

PROJECT NAME	AMOUNT (TAS)[3]
ROMBO DISTRICT	
Two classrooms for Kamwanga Primary School	2,500,000
Health Center (Mengeni Kitasha Village)	5,000,000
Library, Mkuu Secondary (Rombo)	8,203,400
Sub-Total	**15,703,400**
MONDULI DISTRICT	
Cattle Dip project for income generation	3,000,000
Two class-rooms and staff office, Irkaswa Primary school	7,000,000
Sub-Total	**10,000,000**
HAI DISTRICT	
Library, Oshara Secondary	6,067,600
Library , Lukani Village	3,418,950
Pipes/water supply-Kambarage Secondary School (Matadi village)	11,775,350
Sub-Total	**21,261,900**
MOSHI RURAL DISTRICT	
Foot paths/pavements- Ashira Secondary- Marangu	3,410,000
Renovation of the Makunduchi Primary School	3,223,000

[3] Tanzanian Shillings

Renovation of technical school Lole Marera	3,122,800
Sub Total	**9,755,800**
Grand Total	**56,721,100**

Source: KINAPA CCS report

Through CCS the park assists communities in their initiated social development projects and other income generating and conservation oriented projects, that lead to improving their livelihoods. Since the inception of CCS, communities have been regarded as allies in conservation. There is a belief that conservation awareness, which created the idea of benefit sharing, and participation in conservation management and planning, has to some extent changed the negative attitudes towards KINAPA that existed before (Moirana, 2001 pers. comm.). The support given to the park authority is now considered encouraging and has improved the relationships between the park officials and local people. This is evident for instance, in declining reports of illegal activities and in the assistance given for fire suppression (TANAPA, 2001).

3.8 A conceptual framework of KINAPA tourism and local livelihoods

It is evident that factors shaping the attitudes and behaviour of local people to the park are complex and dynamic. Consequently, to build and sustain favourable relationships requires continued efforts on both sides. The review of literature in Chapter 2 and the more specific views raised in this chapter are developed in a conceptual framework (Figure 3.5) that portrays current understanding. It also enables contextualization of particular determinants selected for study.

The key principle underpinning the conceptual framework is that the balance between benefits and costs that local people experience is a determinant shaping support for KINAPA. As is the case elsewhere, the behaviour patterns of people around the mountain in terms of being supportive or not supportive to the park management, have been influenced by both benefits and costs experienced from the act of conserving the area. The benefit component is largely experienced through returns from Community Conservation Services and employment. The most direct benefits to individuals accrue through employment in either the public or private sector. Since opportunities are limited in the public sector, it is private sector employment that holds the

greatest potential to leverage changes in attitudes and behaviour, and is therefore, a focus of this study.

The mountain climbing opportunity and the amount of benefit accrual, is determined by individual capacity in terms of communication skills and interpersonal skills. Neither the porters nor the guides have formal training in their field of work so there is no formal quality control and accreditation of competence. There is also no support service to provide this nor finance to initiate own businesses. Scarce opportunities for either formal or informal types of employment in the public or private sector have brought about competition between individual youths from a growing population. Mount KINAPA tourism and its support services, create new employment opportunities and hence influence migration patterns in the area that increase the rate of population growth. It has been noted that provision of employment opportunities through allocation of concessions, especially by tour and hotel operators helps build support for the national park conservation by civil society. However, this is not as effective as hoped because there are very few permanent employment opportunities offered by the park. The rapid population growth has led to there being many unskilled youths in the area. In addition, portering and guiding is generally poorly organised by stakeholders.

A fundamental principle recognised as being important in developing this conceptual framework is that, if the area is well managed by all stakeholders, Mount KINAPA tourism will continue to provide benefits for local people and this will lead to their support for conservation issues. The following conceptual framework (Figure 3.5) presents problems and opportunities available for porters and guides in the tourism component of Mount KINAPA park-neighbour interactions.

KINAPA strives to ensure supportive behaviour and does this through CCS and employment, particularly in the private sector. Opportunities are limited and ability to engage opportunity is affected by capacity, finances and quality control that can however be improved through support services. It is also determined by competition which reflects a population growth that is faster than the creation of opportunities. Livelihood needs only partially satisfied by employment, cause people to engage other strategies which may be in conflict with conservation.

High population growth and competition for short duration employment as porters and guides, means that benefits are sporadic and probably inadequate to sustain livelihoods. It can be postulated that people would adopt multiple strategies to sustain livelihoods. Some of these essential strategies would be consumptive (e.g. collecting resources) others might require changes to land use (e.g. cultivation). How the authorities interact with these complex livelihood issues would determine shifts in behaviour and attitudes. This posits a need for a more integrated approach than currently adopted through CCS and employment as porters and guides. The framework presented in Figure 3.5 highlights the role of employment as porters and guides in rural livelihoods and as a determinant of attitude to KINAPA. It also directs research to consider the role of such employment in the postulated complex livelihood strategies.

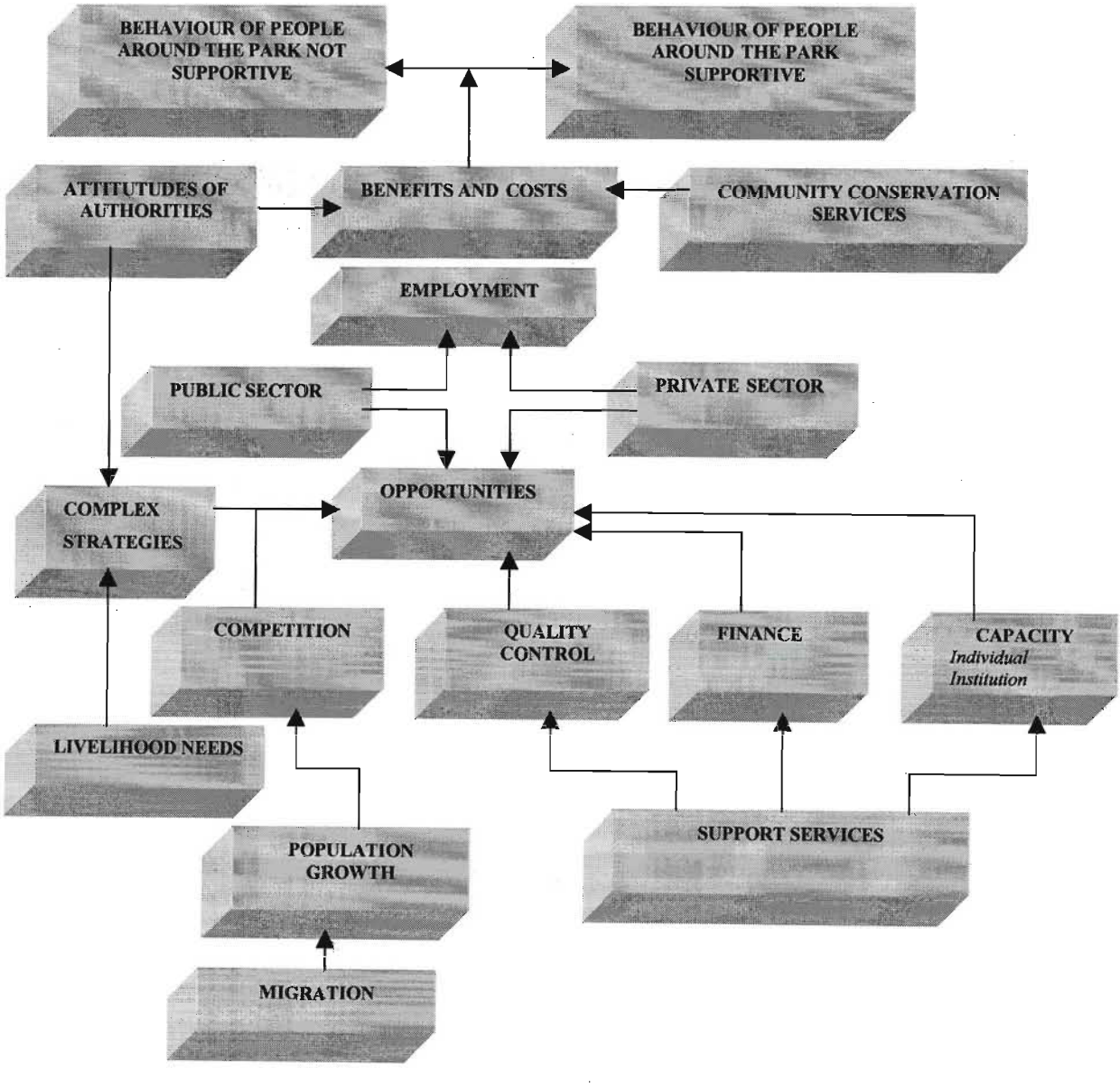


Figure 3.5 A conceptual framework for Mountain Kilimanjaro National Park

CHAPTER 4
METHODOLOGY

4.1 General approach

This dissertation is an examination of the relationships between parks and neighbours. It seeks to give the reader an understanding of the role of porters, guides and their involvement in tourism in Mount Kilimanjaro National Park. It further seeks to explore park-neighbour interactions around Mount Kilimanjaro. The dissertation was motivated by clear evidence of local people's involvement in tourism activities that take place in and outside the park. Furthermore, local people, mainly porters and guides, in the study area are believed to benefit directly from the mountain's tourism specifically and the industry as a whole. This assumption was based on the premise that there is an appreciation of the benefit accrual by local people through employment opportunities and project development assistances given by the park to them. However, the extent of benefit and the way the benefits would influence the local people to support conservation of the mountain in general, was not known neither was it documented. A case study of porters and guides is used to investigate how KINAPA tourism can significantly contribute to local people's livelihoods at grassroot levels and can therefore influence their support towards conservation of the area.

In order to get an insight into the Mount Kilimanjaro National Park tourism and local people's livelihoods, qualitative and quantitative social science methods were employed in this study. Sayer (1992) noted that, further options in undertaking tourism research in socio-economic and behavioural context are to use qualitative methodologies as well as to integrate qualitative and quantitative methodologies. Butler and Hinch (1996) state there is no single method/technique that is universal enough to be successfully applied in all situations. Using a wide range of methods helps practitioners better understand which factors including sometimes neglected socio-cultural ones, influence critical behaviours (Peil, *et al.,* 1982). Choosing the best method depends upon the research goal, the situation and the participants. Every method has its own biases, which can be overcome by using a diversity of methods (Freudenberger *et al.*, 1990; Whyte, 1997).

Together the various methods provide different information, which is mutually enriching (Whyte, 1997). For this study, it was important to select techniques that are complementary as they provide crosschecks and new information. The following section describes these methods.

4.2 Qualitative and quantitative methodologies

According to the literature, qualitative methodologies can assess complex social and psychological phenomena in a culturally and economically appropriate manner as well as account for and incorporate the concepts which make up the culturally specific stance of a population (Nichols, 1995). Qualitative methods, particularly structured interviewing and observation allow for additional prospects of ascertaining the general socio-economic demands of local people which in turn results in its appropriate operationalisation (Fink and Kosecoff, 1985; Butler and Hinch, 1996).

The qualitative research methods were selected based on their appropriate ways of collecting varied and large amounts of information on the case being examined. This method was applied because it can provide detailed demographic information, which can be used both to describe the sample as well as to provide variables for further analysis (Butler and Hinch, 1996). Under qualitative methods, a well-structured, valid and reliable questionnaire allows the wide spread of collection of primary data. This method enables the researcher to collect data on specific, clearly demarcated variables (Nichols, 1995; Sayer, 1992).

Conversely, quantitative methods can elicit a substantial amount of focused specific information (Butler and Hinch, 1996). However, by combining both methodologies, it is possible to crosscheck the validity of the quantitative information as well as to ensure that qualitative methods are undertaken in a systematic manner and are representative of the population under consideration (Simmons, 1984). Nichols (1995) in the social research noted that, even a survey alone is useful but is often best used together with other complementary research tools. In this study, other methods such as informal interview/discussions, literature review and field observations were also applied to supplement the questionnaire survey.

4.2.1 Primary data

Interviews

As one of the qualitative methods employed, structured interviews were adopted for this study as a method for gathering primary data. As such, it was necessary for the researcher to prepare an interview schedule (see appendix 1). According to May (1993) a major advantage of an interview schedule is that it makes interviewing of a number of different people more systematic and comprehensive by delimiting the issues to be taken up in the survey. Based on this understanding the study had to develop a set of predetermined questions that were to be explored during the interviews. These questions served as a checklist during the interviews and ensured the same information was obtained from a number of key interviewees.

The interviews involved direct contact between the researcher and the respondents. This was necessary to facilitate the identification of key issues pertinent to the study, and to clarify issues and correct misunderstandings. The survey was conducted with individuals who had specialised knowledge of interest and relevance to the study. These included park wardens who were in charge of the gates at Mweka and Marangu during the month of September 2001. The porters and guides questionnaire survey was at first developed in English and translated into Ki Swahili the national language widely used and known by the interviewees and the majority of Tanzanians. The questionnaire was pre-tested in order to clarify some issues. Several changes were adopted and modified accordingly. The interviews took place at two important exit gates, namely Marangu and Mweka. The reason for choosing these two gates is that they are the only gates used by the mountain climbers for descent. Before the start of interviews the researcher explained to the head guide of a descending group about the research and its objectives. Most of the head guides were very positive to the research as they perceived future changes, which might advance their job performance. The head guide in turn explained the same to his colleagues. This facilitated communication between the researcher and the interviewees.

The survey forms were distributed to the interviewees to fill in with interviewers being available to answer any query. The researcher and two assistants, one located at each exit gate, conducted the interviews. This facilitated the filling of the questionnaire within the study period.

Field observations and discussions

This is another useful method that preserves the holistic nature of the attitudes being observed and its complex interaction with the environment. It provides direct evidence for behaviour steps, antecedents and consequences rather than indirect information via self-report methods like surveys and questionnaires. According to Graeff, *et al.*, (1993) observational studies are often used in conjunction with other data-gathering techniques as a validation of survey data or as a way of teasing out elements of a complex set of interactions. Field observation is the most useful method for understanding the needs of local people (Thomas-Slayter, *et al.*, 1993).

Important insights about the research were obtained by observation in the field. Personal field observation contributed to understanding the complexities of tourism and local people's welfare. Field observation was conducted throughout the research period by covering the area extensively by vehicle and walking and interacting with respondents, local people, tour/hotel concessionaires and park staff. For example, at Nalemoru gate, it was easy to observe some porters' dissatisfaction when the senior guide was selecting a group of porters to climb the mountain. Another observation was during the clearance of luggage by senior guides and porters where most of the luggage exceeding 15 kilograms meant the need to take an additional porter. Insight was facilitated by the researcher's personal experience as an employee of TANAPA. This allowed the researcher to avoid the biases such as missing major events taking place, or the accumulation of objective facts which are important in making value judgements and for understanding of the data acquired in the interviews (Babbie, 1973; Smith, 1977; Johnston, 1986; Sayer, 1992). Areas visited include Rongai (Nalemoru), Londrosi, Mweka, Umbwe, Machame and Marangu gates.

Valuable discussions were conducted with different stakeholders around the study area, and in the town Moshi where most of the mountain tour operators are based. Other stakeholders included the Tanzania Tourism Board (TTB) staff based in the Arusha office and the Cultural Tourism staff. There was further frequent interaction and discussions between the Tanzania National Parks and Kilimanjaro National Park staff throughout the study period. These informal group discussions were used as a technique to check the information collected through questionnaire.

Most of the findings from this method did not differ from those obtained from the questionnaire survey.

4.2.2 Secondary data

Literature review

According to Sayer (1992) secondary facts provide an introduction to the social and ecological context of a situation for those not already familiar with it or these facts can broaden the perspectives and challenge the assumptions of those people who are already familiar with the situation. Whyte (1997) further noted that secondary facts help practitioners develop questions and hypotheses to be addressed by direct information gathering.

Furthermore, to supplement the interviews, a documentary analysis was required to examine the material generated by KINAPA and TANAPA in general. According to Peil *et al.,* (1982) a major advantage of this method is that the documents are generated contemporaneously with the events to which they refer. As such, they are less likely to be subject to memory decay or memory distortion compared with data obtained from an interview. However, an important disadvantage is that they may be subject to selective-deposit or selective-survival (Peil *et al.,* 1982).

A survey of documentary data relevant to the study was conducted. The key sources of the data collected from the organisation's office and other related institutions included visitor records, departmental monthly reports, performance reports especially for CCS, maps, minutes of the meetings, and other related files. These documents were a useful source of information on the activities and processes of the park-people relations. They had to be assessed for background knowledge. This approach generated ideas concerning the questions that were to be pursued through observations. This information was necessary to assist the study with background information and factual details.

A literature review was undertaken to develop a conceptual framework which is presented in Chapter 3 (Figure 3.5) of this dissertation. The review of existing knowledge involved the relevant literature on a number of subject issues pertaining to the study, topical and area specific articles from journals and newspapers, related research and books, other official and non official

study documents, area specific statistics as well as archives and files. This information was gathered from the University of Natal library, the College of African Wildlife Management-Mweka library, African Wildlife Foundation (AWF) library in Arusha, and at the KINAPA and TANAPA offices respectively. The search for such information was important in order to gain the insight into the study and to achieve its objectives.

4.3 Sampling procedures

The focus of the study was on the porters and guides who are the major group of local people in direct contact with tourists. Thus the sample unit was both porters and guides. A random sampling procedure was employed in picking the sample units. To a lesser extent chance encounter was used on the sample units.

During the research period, about 1,655 porters and guides descended from the mountain (Appendix II). At least 6 porters and guides were interviewed daily in a three week period (1st to 21st September 2001). Out of 150 questionnaires distributed both at Marangu and Mweka gates, only 127 were returned. Respondents who were asked to fill the questionnaire out at home did not return 23 questionnaire forms.

4.4 Research limitations

The study had some limitations. Whenever possible attempts were made to mitigate these limiting effects. For example, questions about benefits from national parks seem particularly problematic. The reason could be reluctance of people to answer survey questions relating to income and benefits. Some of the guides and porters intended for interviews were missed as they were hurrying to catch transport to town as tourists were either scheduled to go to other parks or catch their flights back home. Such respondents were given the forms to take home with them, some of which were never returned.

The majority of the porters and guides were complaining of being so tired such that, they were not able to respond to the survey. Experience has shown that, people descending from the mountain are already exhausted and that, any additional task they are asked to perform at the exit gate is regarded as a torment as they would like to rest (Mbatia, 2001 pers. comm.).

4.5 Reliability of the information collected

The information collected is believed to be reliable since both the researcher and the assistants are knowledgeable about the area. The research assistants are members of the park staff while the researcher (a member of the local community hailing from one of the villages around the study are) is a Tanzanian National Parks employee. The researcher explained the research purposes, which was made slightly easier because people knew her, which allayed fears and suspicions. Even though some studies have revealed that there may be reluctance for people to answer survey questions relating to income and benefits (Chambers, 1986), the researcher is confident that the information collected is reliable, even though it may occasionally stray, especially on the side of respondents' income affairs.

Interviewees were informed that the surveys were aimed at understanding the current situation of mountain tourism and the way it contributed to local people's livelihoods. The researcher and the two assistants were all known to some of the guides and porters. The above circumstances are believed to have given the interviewees enough confidence to respond reasonably to the survey.

4.6 Data analysis

Survey data were compiled, processed and analysed using Microsoft Access and Excel programmes. Frequency distribution tables and computations of proportions in percentages to investigate the most dominant response among several choices given to interviewees were employed. Nichols (1995) observed that the percentage is a simple and widely understood statistic and that it gives a good feel for how a variable within a sample is distributed over categories.

On the side of multiple response questions, relative frequencies in percentage were calculated on the basis of the number of respondents rather than on the total responses on the question. In addition, each of the major conclusions of this study is based on evidence from multiple sources of information.

CHAPTER 5
AN ANALYSIS OF TOURISM AND LOCAL PEOPLE'S LIVELIHOODS AT KINAPA

5.1 Introduction

The research findings presented in this chapter are largely based on data gathered from a survey which was conducted over three weeks in September 2001. The findings are based on responses from the porters and guides who climbed Mount Kilimanjaro in that period. The porters and guides who were contacted and interviewed in this period were all males; 82 guides and 45 porters (total 127). This corroborates information provided by the park management, who estimate that (97%) of all the porters and guides are male (KINAPA office file).

This chapter is presented in four sections reflecting the conceptual framework in Figure 3.5. One addresses porters' and guides' profiles; the second considers employment opportunities that exist for the benefit of local people; the third addresses park-people relationships, and the fourth considers what could be done to construct improved perceptions of the park amongst local people.

5.2 Profile porters and guides

The profile of porters and guides who participated in the study is summarised in Table 5.1, showing age, education, marital status, regions of origin, districts of origin within the Kilimanjaro region, period when respondents began mountain climbing and the employer. The rationale for considering each of these factors is given alongside the presentation of results below.

It is important that porters and guides are not only in good general health, but also possess the physical and mental stamina to perform well in mountain climbing. Physical fitness is one of the key attributes required of porters and guides for them to be of reliable service on mountain excursions. Based on this understanding, and the recognition that physical fitness generally tends to vary with age, the study investigated age as it is related to participation in portering and guiding.

Table 5.1 Profile of 127 porters and guides

Percentages have been rounded to the nearest whole number so that some totals are slightly greater and others slightly smaller than 100%. Information was gathered from questionnaire returns. If a question was not answered there was no opportunity to probe the reasons.

Percentages of respondents in four age classes

16-25	26-35	36-45	Above 45
15%	63%	17%	5%

Education*

Adult education	Primary	Secondary	Never been to school	Vocational / National Service	Teachers college	English/ comm. skills	Others
1%	35%	43%	1%	15%	2%	2%	4%

Marital status

Married	Single	No response
80%	14%	6%

Percentages of respondents drawn from each of nine Regions

Arusha	Dar-es-salaam	Kilimanjaro	Mara	Mwanza	Iringa	Shinyanga	Singida	Tanga
10%	2%	76%	3%	2%	1%	1%	4%	1%

Percentages of total number of respondents drawn from each of six Districts in Kilimanjaro Region

Hai	Monduli	Moshi rural	Moshi urban	Mwanga	Rombo
3%	1%	49%	11%	6%	6%

Period (years) in which respondents began mountain climbing at KINAPA

1961-1970	1971-1980	1981-1990	1991-2000	2001	No response
2%	9%	31%	53%	4%	2%

Source of information about mountain tourism-related work (portering & guiding)

Friends/ relatives	Publicity	I stay in the Park	Park employee	Other means	No response
50%	11%	6%	9%	9%	15%

Percentages of respondents drawn from different sectors of employment

KINAPA	Tour Operators	Self-employed	No response
0%	77%	10%	13%

Source: Field data

*Percentage is not equal to 100 because some respondents have attended more than one level of education.

Most porters and guides (63%, Table 5.1) were between the ages of 26 and 35. This supports the notion that the rigours of the work are such that older people cannot do this type of work. This suggests a strong correlation between the nature of the work and the age of those who are engaged in it because the representation of the other three age groups is less than 40% (16-25, 36-45 and above 45). The majority of porters and guides (77%) are employees of tour operators (Table 5.1). Interviews with representatives of tour operators[4] around Mount Kilimanjaro clearly showed a deliberate 'policy' of engaging 'physically fit' porters and guides, although this was more strictly applied in the case of the former, whose work is to carry luggage up the mountain.

Education is a factor because it affects opportunity by enhancing interaction especially between porters, guides and tourists. It is also important for capacity building on skills such as first aid and risk management that can help porters and guides perform their roles better. Enquiries in this regard revealed that most (43%) of the respondents have completed secondary school while (35%) had only attended primary school (Table 5.1). For others, levels of education varied from post primary and secondary, national service and vocational training for some respondents (15%) in courses such as mechanics and building technicians. Courses relevant to the work of guiding and portage like tour guiding, cookery, wildlife management and communication were not well represented (4%). Generally, this implies a low level of formal and relevant vocational education among porters and guides, and therefore it is arguable that a narrow range of opportunities for social and economic advancement exists for porters and guides.

The porters and guides operating in the park come from different regions of Tanzania (Table 5.1). Most of the porters and guides (76%) originate from the Kilimanjaro Region. The inter region 'migrant labour' pattern is not very pronounced as only (24%) of porters and guides originate from other regions, with the nearby Arusha Region accounting for nearly half of the porters and guides from outside the Kilimanjaro Region. The other half was originated from seven regions, namely Dar es Salaam, Iringa, Mara, Mwanza, Singida, Shinyanga and Tanga (Table 5.1). This suggests a correlation between portering and guiding with proximity to the park, because the six least represented regions are all far from Kilimanjaro Region. Proximity seems to be a factor even within the Kilimanjaro Region itself as most of the respondents came from Moshi rural District (49%) at the base of the mountain. Despite not being as close to the park, the

[4] Shar Tours; Mauly Tours, Tropical Tours & Safaris and African Environment.

Moshi urban area (11%) was the second most represented district (Table 5.1). This may be attributed to the fact that it is the first point of contact as the tourists arrive and head to the national park, and it accommodates the offices of most tour operators.

Knowing the marital status of the respondents is important to assist in the development of an understanding of responsibilities at the household level in respect of the distribution of benefits from their work. Most respondents (80%) were married and household heads (Table 5.1). The significance of this finding is that the majority of porters and guides were the bread winners in their families, which suggests a great reliance on the benefits accrued from portering and guiding. Portering and guiding clearly contribute to the economy of the region at the household level.

In order to establish whether there has been an increase of economic opportunities for the local people since the inception of mountain tourism in 1977, respondents were asked to state the years when they started their work. Slightly more than half of respondents had less than ten years of working (53%), having started their work between 1991 and 2000 (Table 5.1). The results show a marked decrease between the year 1991 and 2000. Therefore there seems to be low level of recruitment with only (4%) joining in 2001. It might be implied that there are few new opportunities and recently joined porters and guides are merely replacing others who have left. Those who started the work before 1991 may be older than 36 years, which might mean they are becoming less physically able to stand the strenuous work of portering and guiding. Such groups may have diversified into other activities such as trading and farming as indicated by some respondents (Table 5.2a) who elaborated that they were engaged in portering and guiding as a way of raising income (capital) to enable them to undertake other activities in the future, when they are not strong enough to work as porters or guides. It can therefore be concluded that portering and guiding provides economic opportunities for young and middle aged men. The benefits are direct to young-middle aged men, most who are household heads, and the benefits indirect to their families. These benefits are also important for establishing longer-term benefits in old age.

It was also necessary to establish how the respondents got to know about the work of portering and guiding in order to ascertain the level of knowledge by local people about the park. At least half (50%) of respondents learned of the work through friends and relatives (Table 5.1). This

together with the fact that a majority of respondents originate from the Kilimanjaro Region indicates a broadly based awareness of the park and its economic potentials.

The majority (77%) of respondents were employees of the mountain tour operating companies, while only (10%) claimed to be self-employed. Tour-operating companies are contributing to the improvement of the well being of the people in the Kilimanjaro area through creating employment opportunities and availing chances for income generation from both salaries and tips. Such incomes present opportunities for meeting livelihood requirements such as health, education and farming. All these have a feedback effect on the well being of the people and the economy of the area. KINAPA does not employ local people for portering and guiding work, although they are employed for casual work for park maintenance and cleaning the trails.

5.3 Perceptions of employment opportunities for locals living around KINAPA

It may be postulated that the more satisfied the porters and guides are with the returns they receive from their labour, the more positive would be their attitudes to the park. The study sought to investigate perceptions about the relative importance of portering and guiding in comparison with other existing sources of support in the livelihoods of local people. Guiding and portering came out as the dominant (41%) means of livelihood generation. In total, more than half of respondents (58% Table 5.2.a) indicated that they were also engaged in other activities. Of these, agriculture (crop production) and small-scale business were prominent (21% and 19%) respectively. In descending order, the rest of the activities were livestock rearing (16%), and casual work in the park (2%). This is an indication that guiding and portering are the most important livelihood strategies in the area for guides and porters, which is in most cases complemented with agriculture (crop production).

When asked whether respondents were conducting portering and guiding elsewhere as an alternative to supplement their income apart from activity on Kilimanjaro, the majority (65%) of respondents indicated that they do work in other tourism areas, particularly Mount Meru. Other areas indicated by respondents are shown in Table 5.2a. This implies that porters and guides can raise their earnings, particularly since some porters double as cooks for safari companies while experienced guides are used for both mountain and savannah safaris. This suggests further that people are opportunists and spread risk by adopting a multifaceted strategy for sustaining

livelihoods. It indicates also that, consideration needs to be given by the authorities to multi-skilling as an approach to enhancing people's ability to enter into and stay in employment.

When respondents were asked how they felt about the benefits from portering and guiding compared to those from other activities, most (89%) considered them better and only 3% felt they were worse. Generally, respondents indicated mountain tourism activities were the best of all livelihood activities (Table 5.2a). This was presented as much better (24%), better (30%), and fair (35%). There is a general implication that porters and guides can earn cash within a short period of time, which no other economic activity in the area offers.

Respondents were asked to indicate perceptions of whether the income from portage and guiding was 'sufficient' in order for the researcher to gain an insight into how pressured they felt for securing other sources of support. Those who indicated the income was sufficient (43%) elaborated further: enough to support family (28%), it is satisfactory (24%) the income meets basic needs (20%, Table 5.2a). More than half (57%) indicated that the income generated from portage and guiding was insufficient, citing the following reasons; low salaries (40%), expensive cost of living and commodities (36% Table 5.2a). These findings indicate clearly that for most people, the returns from working as guides and porters are such that they feel pressured to access other sources of support and ways of subsisting. It is consequently not surprising that agriculture is considered an important activity.

Since portering and guiding is limited to the physically fit, and because some respondents had indicated that they used money to establish other enterprises, it was considered helpful to seek insight into what their income was spent on. The majority (88%) of respondents indicated that the money accrued from the park was generally spent on meeting family livelihood needs, citing food, clothing, family emergencies, bedding, market and shop purchases, raising the family. Money was spent on also education (57%), health care (28%) and savings (21%, Table 5.2a). It is important to appreciate that tourism on Mount Kilimanjaro is seasonal and the responses need to be interpreted with caution. It is not clear that if the respondents drew distinction between yearly needs and earnings and those associated with the period of employment in the tourist season. It can be tentatively concluded that survival for most families requires division of labour and a multifaceted livelihood strategy, possibly involving different members of households in different

activities at different times. This holds very important implications for building relations between the park and people.

Table 5.2a Perceptions of employment opportunities that exist for local people

Percentages have been rounded to the nearest whole number so that some totals are slightly greater and others slightly smaller than 100%

Percentages of portering and guiding work in comparison with other means of livelihoods				
Agriculture	Livestock	Portering and guiding	Casual work in the park	Small scale business
21%	16%	41%	2%	19%

Alternate places where porters and guides engage/ operate other than KINAPA						
Mt. Meru	Mt. Kenya	Cultural Tourism	Zanzibar	Oldonyo Lengai	Other parks*	No response
65%	3%	9%	2%	2%	13%	7%

Perceptions of mountain activities in comparison with other livelihood activities				
Much better	Better	Fair	Bad	No response
24%	30%	35%	3%	7%

Sufficiency of income from guiding and portering activities on Mount Kilimanjaro	
Sufficient	Not sufficient
43%	57%

Perceptions of income sufficiency from guiding and portering	
Enough to support family	28%
Satisfactory (enough)	24%
Meets basic needs	20%
No other reliable alternatives	15%
Serves education for children	4%
Supports income from somewhere else	4%
Seasonally enough	4%

Perceptions of income insufficiency from guiding and portering**	
Low salary	40%
Expensive cost of living/ commodities/ diverse needs	36%
Insufficient trips/ long low season	10%
Difficult life	4%
Not enough for children's education	4%
I have a big family	4%
Difficult work	2%
I am a big spender	2%

Major priorities for which respondents spend their money**			
Family use (food, clothing, etc.)	Education	Health services	Savings
88%	57%	28%	21%

Proportion of salary from portering and guiding used in support of livelihoods at household level				
Whole salary	Bigger proportion	Half of salary	Smaller amount	No response
19%	43%	25%	10%	3%

Source: Field data

* Ngorongoro Conservation Area; Serengeti and Tarangire National Parks

** Percentages do not total 100 as multiple responses were permitted

To be more specific, respondents were asked to indicate the proportion of their salaries they used to support their livelihoods at household level. This question was asked in order to gain insight into the proportion of income that trickles down to household levels and their impacts on family members' livelihoods. The majority (87%) of respondents stated that they spent their salary in support of livelihoods at the household level. The proportions varied between those who said they used a bigger proportion of the salary (43%), half of the salary (25%) and those who said they used their all salary (19%) for household requirements. Only a few respondents (10%) said they used a small amount of their salary to support their household needs (Table 5.2a). These were single persons (14%) with no dependants and therefore are not bread winners for a family (Table 5.1a).

Earnings from fees are not the only benefits that porters and guides receive. They may also receive money as gratuities for work well done and material goods. Clearly these 'gifts' also influence perceptions of the return for labour. Table 5.2b shows these benefits to be predominantly material and tangible like climbing gear including clothes, shoes and apparel. The percentage of materials cited were as follows; clothes (33%) including sleeping bags, jackets, trousers, warm clothes and T-shirts; shoes and mountain hiking boots (26%); small items of apparel (14%), including sunglasses, watches, walking sticks, bags, torches, pens and head caps. Some (12%) said as another form of benefit, they learnt different cultures and languages (Table 5.2b). Interesting to note is the acknowledgement of non-material benefits such as learning and making friends. These contribute meaningfully to personal growth and thereby improve work prospects and attitudes to the park. Since these benefits are seen as being few (e.g. only 3% received advice) it is evident that more effort could go into briefing climbers with a view to gaining a greater advantage for porters and guides from their association with climbers. The results suggest that benefits received from tourists over and above their wages and tips are also a significant performance incentive to porters and guides.

In order to gain insight into the overall impression of porters and guides as to the benefits accrued from tourism, respondents were asked to rank their perceptions of the benefits. Most (75%) perceived benefits to be fair while 9% said it was sufficient and 7% said they were more than sufficient. Only 3% felt the benefits were very few (Table 5.2b). It is instructive to compare this finding with that in which more than half of respondents said the income was insufficient (Table

5.2a). This informs us that while porters and guides feel they do not earn enough to meet livelihood needs, they nevertheless feel the returns for labour in portering and guiding are fair.

Table 5.2b Percentages of respondents receiving various benefits other than wages and tips, and their perceptions of overall benefits of portering and guiding

Percentages of respondents receiving various benefits				
Clothes - sleeping bags, jackets, warm clothes.....				33%
Shoes and mountain climbing boots				26%
Small items - sunglasses, watches, walking sticks...				14%
Learned different culture and languages				12%
Made friendships				5%
Advice in life				3%
Overseas trip				1%
Others - self development, home visits, employment, experience...				6%
Perceptions of the overall benefits accrued from portering and guiding				
Very few	Fair	Sufficient	More than sufficient	No response
3%	75%	9%	7%	6%

Source: Field data

Whilst porters and guides may consider returns for labour to be fair, this is not necessarily the case if wages are compared across other employment sectors. KINAPA proposed that guide wages should be US$ 8 (minimum) per day and US$ 6 for porters per day[2]. This was because wages were very low and guides and porters would harass clients for tips. Respondents were asked to disclose income from wages and tips. The findings must be interpreted cautiously as there is inevitable sensitivity about disclosing such information. The findings reveal that tips range from US$ 10 to US$ 150 with an average of US$ 46 for both porters and guides for a trip of 6 days. Respondents are still paid, on average, low wages at US$ 29 for a trip of 6 days (Table 5.2c). The implication is that tour operators who employ most of the respondents, are not responding positively towards the increase of porters' and guides' wages as the park authority requires. Whilst determination of a mean value where the range is so high (Table 5.2c) is problematic, it is evident that substantially greater benefits (monetary and material) accrue to porters and guides from tips than from wages. This 'under investment' by tour operators leads inevitably to marginalisation of porters and guides in the greater opportunities of tourism. Importantly, failure to acknowledge the professional nature and responsibilities associated with portering and guiding, leads to poor commitment to training by the employers (tour operators) and to consequent elevated levels of risk and liability.

[2] American (US$) dollar 1 was equivalent to Tanzanian shillings 880 during the study period.

The high incidence of no response income as tips (n=30) and wages (n=20, Table 5.2.c) may be attributed to the respondents' fear to disclose their income. People do not comfortably disclose financial issues pertaining to themselves, as they think their source of income may be affected particularly where the income is so central to survival. Respondents might also feel they are more likely to encourage future benefits by denying that anything significant is being received presently (Bergin, 1996).

Table 5.2c Returns for labour as stated by respondents

A trip normally lasts 6 days. The table shows the wages and tips and the number of respondents for each category. Findings should be interpreted with caution.

Wages paid per trip US$*	Guides	Porters	Guides and Porter
8	1	0	1
10	1	1	2
11	1	0	1
13	0	2	2
17	2	10	12
18	1	0	1
19	2	0	2
20	9	12	21
22	7	2	9
23	0	1	1
25	1	0	1
27	2	0	2
28	8	2	10
29	2	0	2
30	2	1	3
31	3	1	4
33	1	1	2
34	20	1	21
36	0	1	1
39	1	0	1
40	2	0	2
45	2	1	3
51	1	0	1
56	1	0	1
65	1	0	1
No response	11	9	20
Average US $ given as wage = 29.2			
Tips paid per trip US$	**Guides**	**Porters**	**Guides and porters**
10	3	20	23
11	0	1	1
15	2	5	7
17	1	0	1
20	6	5	11
21	0	1	1
30	7	1	8
33	1	0	1
35	3	2	5
37	1	0	1
39	1	0	1
40	6	0	6
45	3	0	3
50	18	0	18
60	3	0	3
65	1	0	1
70	1	0	1
75	1	0	1
100	3	0	3
150	1	0	1
No response	20	10	30
Average US $ given as tip per trip = 46.15			

Source: Field data

* Currency; US $ 1= TAS 880

In summary, porters and guides consider that benefit accrual from mountain tourism is a limited strategy for raising some of the required cash, and that it is not a long-term alternative for survival. This finding has revealed a dependence on other subsistence and economic activities to accomplish risk reduction. The findings suggest that there multifaceted and subtle ways in which people's livelihoods vary in time and space and the way in which they are intertwined with the existence of the park. Based on this scenario, it is suggested that an holistic strategy that acknowledges the complexity of livelihoods, and seeks to reduce risk to livelihoods would make a meaningful contribution to creating positive attitudes. It is also important to appreciate that different livelihood strategies are spatially separated. Clearly, these people see their lives as an integrated set of strategies. Separating the role of the park agency from those of other agencies (e.g. forestry, agriculture and tour operators) is unlikely to yield an integrated support system. The mountain, with all its components needs to be managed as a complex system supporting complex livelihood strategies that vary in time and space.

5.4 Parks-people relationships

In order to investigate attitudes about support from the park to the local people, respondents were asked to list things the park does for them. A majority (75%) of respondents indicated the park supports local community development projects citing school construction and repair, dispensary construction and furnishing, construction and repair of bridges, roads, and water supply projects. In descending order, other responses included youth employment (20%) and protection of the forest and environment (8%, Table 5.3).

The reasons stated for the perceived benefits from the national park presence to the respondents were because local people are responsible for conserving the area (47%), they are resident neighbours bordering the mountain (30%), and that the mountain and the forest are in their area (10%). This shows there is general knowledge and awareness among local people that the park supports their development initiatives because they are neighbours and because of their specific responsibility.

KINAPA is involving local people in conservation as the organisation perceives a need to direct their attitudes and behaviours from being unsupportive to being supportive to the management of the park. Respondents were asked to state their perceptions of the magnitude of support for

conservation by local people in and around the mountain. Half of the respondents (50%) felt local people were very supportive of conservation, while 44% said they are supportive, indicating that the overwhelming majority (94%) support conservation. However, a small proportion (6%) of respondents felt local people were unsupportive (Table 5.3). Further evidence of local people support for the park is revealed through their reporting illegal activities and their support in fire suppression on the mountain (Moirana, 2001 pers. comm.).

Respondents were asked to indicate benefits other than economic, that they obtain from the mountain and the natural forest, in order to investigate their knowledge about other non-monetary benefits the mountain offers to the local people. Although the question was not directed at the economic gains, about one third stated employment for young people (35%) was benefiting them more than other opportunities. Also noted was the fact that Mount Kilimanjaro provides them with clean water, rainfall and water catchments (25%) as a support for life throughout the year (Table 5.3). The fact that respondents mentioned things like firewood and livestock foraging that would be illegal activities in the park, may support a view that respondents were not distinguishing between the park, the forest area and the lower slopes of the mountain. It may be inferred from these responses that local people living on the slopes of Mount Kilimanjaro have a general knowledge of the importance of the natural and physical presence of the mountain, and their attitudes are therefore not founded only on the labour they market.

It appears from the responses (Table 5.3) that respondents were identifying themselves with the mountain and the forest as much as with the park. They seem to envisage the mountain as one system albeit that its components may provide for different needs. This suggests that whilst there would be sound ecological reasons for regarding the mountain as one ecosystem, there are equally good economic reasons for regarding it as a single system providing for a range of livelihood needs. Thus it is only the present administration designation that disaggregates it into disconnected parts. Clearly, there should be a move to an integrated approach to the management of what is a naturally integrated ecosystem providing for integrated livelihoods.

Table 5.3 Perceptions held by local people about the national park, its presence and contribution to their welfare

Perceived benefits from the National Park's presence and operations to local people*					
Community development projects	Youth employment	Security	Conservation education	Protection of the environment	Others
75%	20%	2%	1%	8%	10%

Reasons for perceived benefits from the National Park's presence and operations to local people*	
Local people are responsible for conserving the area	47%
**Locals are resident neighbours bordering the *mountain*	30%
**The *mountain* and forest is in the local people's area/it is theirs	10%
To improve collaboration/good neighbour relationship	10%
**To benefit from the *mountain*	8%
The park has money from tourism	4%
**The *mountain* is the nation's natural resource	4%
Locals people don't have ability/ cannot afford such development	2%
Others; locals were there before the gazettment of the park, have many problems, are powerful over the area, to develop their economy	3%
No response	8%

Local people's feelings about conservation		
Very supportive	Supportive	Not supportive
50%	44%	6%

A list of other benefits locals get from the National Park and the Forest Reserve*	
Employment for young people	35%
Clean water/ rainfall/ water catchments	25%
Development projects/aids/services	14%
Good weather/good season	8%
Supported by income from tourism/ acquire livelihood for our families	11%
Conduct our small business for tourists	4%
Firewood	3%
Raise conservation awareness	3%
Livestock forage	3%
Fertile soils	2%
Health care	1%
Others; attraction, tourism, villagers awareness etc.	6%

*Percentage does not total to 100 as multiple responses were permitted
** Local people identify themselves with the mountain and the forest and not with the park.

5.5 Improving management of the park and the work of porters and guides

Whilst the evidence suggests a fairly good relationship between the park and the local people, it is desirable to consider what the park can do in order to improve relations. To investigate how the park could assist porters and guides in performing their work, respondents were asked to mention things the park officials could do to improve the park operations and make their job easier. The responses to this question revealed diversified views on what could be done by the park officials.

The leading response was a request for the park officials to supervise luggage weighing and to monitor porters' movement up the mountain (28%). Several valuable suggestions were grouped together under the category 'others' (Table 5.4). The overriding concern of respondents that is reflected in this question was that the park should assist in limiting the weight of the load which a porter is expected to carry. The park should help to control the movement of porters and guides up the mountain to make sure there is no porter carrying more than is reasonable to expect.

To broaden the scope of their suggestions, respondents were given an opportunity to indicate the things they would give priority to in management, if they were the Chief Park Warden of KINAPA. Thirty nine percent of respondents said they would improve the cleanliness of the mountain, while 28% indicated they would collaborate with tour/hotel operators to increase their salaries. The different categories of answers are shown in Table 5.4. The fact that respondents raised the issue of cleanliness of the mountain indicates that the current system is not meeting their expectations. Since they perceive this issue to be one of the key areas requiring attention, and since it is vital for the sustainability of tourism there, it is quite possible that they might want to contribute in its resolution. This issue needs to be followed up to find an appropriate solution.

Experience has shown that there is no mechanism in place that controls porters and guides who climb the mountain, or how many times they do so. Respondents were asked to state their feelings over who should be given priority to climb the mountain. Although the majority of respondents are originally from the Kilimanjaro region (76%, Table 5.1), almost half of the respondents (46%) in this survey felt experienced people should be given priority while 30% felt this type of work could be given to whoever qualifies as long as he/she is a citizen of Tanzania. About 22% thought it would be good if local people took up such opportunities (Table 5.4). The findings imply that experience is one of the perceived requirements of porters and guides in performing well on the mountain climb.

Table 5.4 Things that can be done to better manage the park and make the work of porters and guides easier

What should KINAPA officials do to improve park operations and make the work of porters and guides easier?*	
Supervise luggage weighing and carrying	28%
Increase training opportunities	11%
Ensure collaboration with porter/guides	8%
Liaise with tour operators to increase salaries	8%
Improve roads and trails network	7%
Improve tourists services	6%
Increase mountain climbing & other working gear	4%
Improve mountain cleanliness	6%
Improve work performance	3%
Enforce law	3%
Improve communication problems	3%
Maintain good/neighbour relationship	3%
Improve the mountain environment	3%
Others; first aid, security, provide helicopter for rescue, the park is already doing good work etc.	27%
No response	4%

Important priorities respondents would give attention to if they were the Chief Park Warden of KINAPA	
Improve park Mt. Cleanliness	39%
Collaborate with TOs to increase salaries	28%
Conserve/protect the environment & resources	17%
Ensure park and tourists' security	16%

Who among porters and guides should be given priority to climb the mountain with tourists?			
Local people	Experienced people	Learners	Citizens (Tanzanians)
22%	46%	2%	30%

Who provides training for the porters and guides?					
Tour Company	KINAPA	Colleges	NOLS	Others (Individual)	No response
7%	40%	5%	1%	17%	30%

How respondents assess the outcomes of the training				
Excellent	Good	Fair	Poor	No response
44%	18%	14%	2%	22%

Whether respondents need training in the future	
Yes	No
83%	17%

*Percentage is not equal to 100 because multiple responses were permitted

To investigate the type of training porters and guides have had concerning their work, respondents were asked to state any institution/organisation or individuals who offered them training. This question was aimed at cross-checking the real situation and discussions held with

some of the park staff on issues pertaining to training in relation to porters' and guides' work performance. About 40% of respondents acknowledged KINAPA trained them while 30% of respondents did not respond to the question. The lack of response may indicate that some respondents were not trained in their field of work, and thus, they were not beneficiaries of any type of training. Most training offered was between 1 week to 1 month, and occasionally 3 months. For those who received training they generally indicated the outcome was good (76%), citing excellent (44%), good (18%) and fair (14%). Other responses are referred to Table 5.4. This implies that respondents who received training found it useful.

In order to establish whether training was considered important to the respondents, they were asked to indicate if they needed training in future. A majority (83%) gave an affirmative response, while (17%) felt it was not necessary (Table 5.4). The implication is that for the respondents to be efficient and effective in performing their work, training on guiding and portering is imperative. The level and amount of training required was not established, but might include mountain ecology, interpretation, rescue (safety), security, and communication skills, to mention a few. This calls upon the park in collaboration with other stakeholders, to take a proactive approach by conducting training needs assessment for the guides and porters and to ensure its implementation. The results of training will further enable the park and mountain operators to render quality services as required by the tourism industry (TANAPA, 1994). It will enhance visitors' satisfaction and thus reduce complaints. The park management can further assist more porters and guides to gain higher incomes by working with private companies to organise and prioritise training for exclusive mountain operations.

The issues emerging from the results presented above can be summarised as follows:

- People identify themselves with the mountain and not only the park
- The complexity of livelihood strategies for local people
- Sustaining benefit accrual from the park

The results show that KINAPA is playing a major role in promoting the livelihoods of local people living adjacent Mount Kilimanjaro. KINAPA does not cover the whole mountain but just one sector of the whole mountain ecosystem. It is surrounded by the Kilimanjaro Forest Reserve, pine and conifer plantations and the lower slopes. Most local people identify themselves with the

mountain as much as they do with the park. They appear not to discriminate the mountain from the park.

Portering and guiding as an economic activity has become part of the community strategy for addressing their livelihood needs. It supplements other economic strategies such as crop production, livestock rearing, small business and others. The money accrued from portering and guiding provides them and their families with cash which can be used to meet all sorts of small household needs that are not met by agriculture or livestock rearing.

Guides and porters depend on the park management to maintain an efficient and effective system that will enable them to acquire more tips and wages from mountain tourism activities. They depend on the park management primarily to create and manage a situation that is favourable for their sustained earnings from tourism. A way forward towards an integrated management strategy is discussed in Chapter 6.

CHAPTER 6
DISCUSSION

6.1 Introduction

In chapters 3 and 4, the argument for using a conceptual framework (Senge, 1990) as a means of influencing how we perceive problems and opportunities, identify courses of action and make choices was put forward. In the context of this study, a suitable framework should improve the understanding of human interactions with the natural system (Kilimanjaro Mountain) and improve the ways we accommodate associated complexities (in this case rural livelihoods) and tensions.

This chapter presents a discussion of the findings and revisits the conceptual framework (Figure 3.5). The latter is necessary to evaluate the usefulness of the 'framework approach' in characterising and understanding the porter, guide and tourism component of KINAPA park-neighbour interactions. The chapter demonstrates how the framework was applied at local level and assesses its usefulness in understanding how KINAPA can better influence local people to be more supportive of the conservation of the mountain ecosystem and its natural resources.

The results have drawn attention to three issues that are fundamental for understanding what shapes local perceptions. These issues do not appear to have been identified and appreciated until this research. The three issues are that porters and guides at least, appear to associate themselves with the mountain more than they do with the park, and secondly, that they perceive employment in portering and guiding as one of several concurrent activities in a multifaceted household livelihood strategy that varies in time and space. The third issue that is closely linked to the first two, is the extent to which a lack of co-ordination of organisations and management of land use may shape perceptions of conservation and the achievement of the conservation objectives.

6.2 The mountain, the park and perceptions

Mount Kilimanjaro is one of the isolated mountain blocks of Africa that can be linked to an archipelago of 'islands' of diversified vegetations separated by a "sea" of lowland forest and savannah. The world perceives Mount Kilimanjaro as a big single mountain that is managed to

cater for conservation, research and recreation at the same time to support local people's livelihood needs (TANAPA, 1993). Mount Kilimanjaro's main distinguishing features are its height, its physical form and its place in the historical exploration and 'image' of Africa. Despite being one of the most well known mountains in the world, little is known about how it is, or should be managed. Not all the ecological zones that comprise the core of this World Heritage Site are contained within the Kilimanjaro National Park boundary (Figure 3.1). Further, climbing the mountain requires one to hike through savannah, montane forest, low alpine heath and moorland, alpine desert, snowfield and finally the glaciers (TANAPA, 1993). The national park comprises the upper half of the mountain and its boundaries include six 'right of way' corridors through the forest zone. Visitors, and perhaps porters and guides, are not aware of the administrative boundaries as they pass along the corridors. This reinforces perceptions that the mountain is a single ecosystem under integrated management. Consequently, the roles and responsibilities of organizations mandated to manage different sectors are not appreciated.

The national park promotional materials market the park in and outside Tanzania, as Mount Kilimanjaro National Park and not the portion contained by the park. Most of the promotional brochures, leaflets, web sites and other publicity materials developed by the licensed mountain operators market the mountain tourism business as 'Mount Kilimanjaro' and not as 'KINAPA'. Tourists are thus encouraged to perceive the mountain as a single entity. It has to be realised that, for the management of the mountain to be successful, all the institutions involved in managing the mountain should have common understandings and approaches towards the sustainable development of the mountain and its people.

6.3 Rural livelihoods and perceptions

For local people, tourism is one component among many that supports household needs. This dissertation found a wide range of livelihood[5] strategies for local people around KINAPA. It shows that assessing the impacts of tourism on livelihoods is not a matter of counting jobs or wage incomes, but rather interpreting factors affecting livelihood security, complexity and sustainability. KINAPA porters and guides depend on tourism to supplement their incomes from

[5] 'Livelihood' is defined as the "capacities, assets (including both material and social resources), and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stress and shocks and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resource base" (Carney, 1998).

other economic activities to sustain their livelihoods. The results suggest also that 'sustaining their livelihoods' should not be interpreted as achieving this only while employed as a guide or porter. There are indications that 'excess' income may be employed to develop other livelihood strategies that are spatially and temporary removed from guiding and portering. The principal economic engine associated with KINAPA, namely tourism and its associated demand for supportive services, has influenced immigration in nearby villages seeking employment mainly as porters or guides especially during the tourists' high seasons. This growing competition also influences livelihood strategies towards the adoption of a multi-strategy approach.

Source: KINAPA

Plate 6.1 Porters preparing to carry tourist luggage up Mount Kilimanjaro at Marange Gate

The livelihood strategies for local people's households in the study area vary enormously. Portering and guiding are just part of the community strategy for addressing livelihood needs at the household level in the study area. The local people usually carry out a range of activities that contributes to one or more ways of meeting household needs. Diversified livelihood strategies appear to be essential for local people living adjacent to KINAPA, because engaging in the

tourism business is very complex and risky as it is seasonal, competitive and may be affected by catastrophes (natural and man-made). Local people in the study area engage in a range of economic activities as they seek to secure their livelihoods.

Generally, the income accrued through guiding and portering provides families with cash that is used to meet diversified household livelihood needs. The findings show that the economic benefit accruing to local people from mountain tourism has prompted their acknowledgement and appreciation of the mountain. They appreciate that the mountain provides diversified benefits to human kind, especially those living in its proximity, so much so that local people felt that the task of managing the area should lie in their hands: "the mountain and forest is in the local people's area/it is theirs." The generation of income through employment and the provision of infrastructural benefits to the local people around KINAPA has reinforced these perceptions.

Investment of tourism earnings by porters and guides in agriculture, livestock husbandry, education and other activities was evident from the study. Porters and guides employ neighbours to work in their fields or they buy livestock with their earnings (Moirana, 2001 pers. comm.). Experience has shown that some porters in the study area are engaged in other activities such as crop production and small-scale businesses, especially during the low tourist seasons, due to limited mountain climbing opportunities. From this study, it is evident that tourism supports other activities in that it strengthens a household's productive capacity by providing cash for investment in other livelihood activities. As such, the period during which people are fit enough to engage in mountain climbing is a strong determinant of future livelihood success. For these people, mountain tourism is a major economic activity. During the study, one porter said:

> *"As long as the mountain remains in this location, and tourists keep on coming, we are sure of continued income. With portage and/or guiding one trip with tourists, one would have already outdone a person who would have planted and waited for harvest in six months. It can generate quick money, which can be put into use immediately".*

The growth of tourist facilities along the routes leading to the entry and exit gates is clearly evident. Elite locals are turning their residential bungalows into tourist accommodation in the form of hotels, lodges and chalets. Several restaurants, shops, small-scale businesses and local commuter transport services are in operation along the routes to some of the entry and exit gates. The owners, some of whom are/or used to be guides or porters, are benefiting in these ways from

tourism that takes place on the mountain. In this way, a range of entrepneurial activities are arising as local people service the tourist industry. The employment of local people in these tourist facilities has partly addressed the gender issue, as both men and women are employed particularly in vending activities such as selling of drinks and snacks, postcards, curios and T-shirts to tourists. This gives women a chance of contributing to the welfare needs of their households. Tourism on the mountain has had a considerable 'spill over effect' on the livelihoods of local people, even if they are not formally employed in the tourism sector.

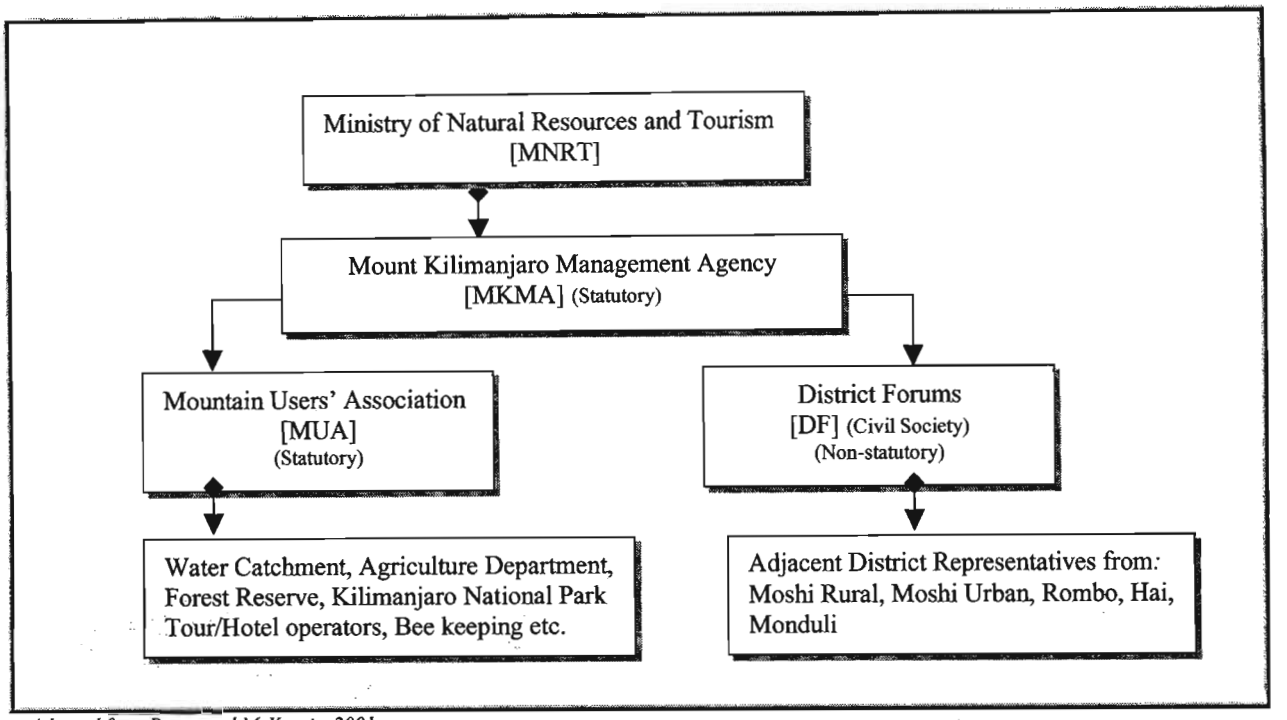
At present this complex economy, based on the desire of foreign visitors to climb to the summit of Mount Kilimanjaro, is based on a management system that lacks integration. Whilst the mountain will doubtless always hold attraction because of its dominance in the landscape, the receding glaciers will reduce this. Clearly, if tourism is to retain its attraction, new values will have to be incorporated into the package on offer. Ironically, the mountain is always portrayed as a system, including the surrounding plain and local inhabitants also perceive it to be an integrated system; yet administrators have 'disaggregated' it into artificial sectors. It is now necessary to develop an integrated approach that is more likely to sustain tourism and rural livelihoods which depend on this.

6.4 Integrated management strategy for Mount KINAPA

The World Heritage Site documentation for Mount Kilimanjaro noted many problems in the management and protection of the whole mountain, and strongly recommended extension of the park boundary to include more of the montane forest for better protection and management of the mountain ecosystem. Despite this, no boundary extensions have occurred to date, and there has been no progress with establishing management by either a single institution that is responsible for integrated management, or by integrating management by the various organizations under their common vision and goals.

One key concern that has to be borne in mind is the increasing requirements of the local people for food, fuel, water, land for agriculture, pastoralism, employment and other livelihood needs and the ecological capacity of the mountain to continue to provide these. The resources of the mountain are finite and growth must therefore encompass a diversification of opportunities rather than more use of those resources currently being used. This suggests that whilst extension of the

park boundary to include the forest might help, the notion of also including some of the plains area also warrants consideration.



Adapted from Breen and McKenzie, 2001

Figure 6.1 Suggested integrated management structures for Mount Kilimanjaro and its surrounding areas

The roles that will be played by each institution as presented in Figure 6.1 are considered below.

Ministry of Natural Resources and Tourism

Integrated management is a process whereby the efforts of all parties (government and civil society) are planned and executed together. For this to happen effectively, there needs to be a lead agency. Since this research suggests that far reaching policy changes will be required, and since the central issues are centred on natural resources, the logical lead agency should be the Ministry of Natural Resources and Tourism. It is envisaged that the Ministry would establish a statutory body, accountable to the Minister, designated the Mount Kilimanjaro Management Agency.

Mount Kilimanjaro Management Agency (MKMA)

The MKMA membership would be broadly representative and should be answerable to a board appointed by the minister. MKMA would be responsible for defining the area for integrated

management (the Kilimanjaro mountain system and its resources). Among other things, it would have to develop and implement a management strategy that would be in harmony with the National Conservation Policy of Tanzania. This should be done in a manner that secures collaboration and agreement from stakeholders and interested persons. Because of the size of the area (which might be extended), and the complexity of achieving equitable and efficient management, statutory and non-statutory bodies should be developed and bearing in mind that success would depend on active involvement by all concerned. It will be important that all sectors involved with the mountain should be specifically addressed. Since it would be impossible to deal with individuals, stakeholders would be required to form constituencies, each of which would designated as a Mountain User Association.

Mountain User Association (MUA)

The MUA (a statutory body) would constitute bodies that would be established for any form of mountain use, including consumptive and non-consumptive uses of natural resources. It would be a body corporate with a management committee directly accountable to its members and broadly accountable to the ministry or to the MKMA, if the minister delegates the responsibility. It would assist with the implementation of the Mount Kilimanjaro integrated management strategy at a local level. The broad role of the MUA therefore, would be to enable people within a community to pool their resources (money, human resource and expertise etc.) to more effectively coordinate and carry out mountain related activities. MUAs may represent various interests, for example water catchment; agriculture; forest reserve; KINAPA; tour/hotel operators; bee keeping, etc. The members would benefit from addressing common interests and other needs and priorities.

District Forum (DF)

District Forums are envisaged as going to be non-statutory bodies. As such, they would be formed by, and be accountable to civil society. The Tanzania National Wildlife Policy places considerable emphasis on public participation and empowerment of local people to manage natural resources to meet their livelihood needs. They desire that stakeholders who share common interests in the area, are able to develop and articulate their interests and concerns in an orderly and constructive manner. A district forum would enable them to participate actively in the management of the mountain ecosystem. These forums are intended to be the most active centres

of participation by civil society in government at local levels. Without these, local people would have little power to influence planning and actions that affect them. Although these forums will be established by civil society to serve their own interest, they will need to accountable to their members and the larger organisation. One way of achieving this would be to formalize agreements between the DFs and MUAs and MKMA. Cooperation agreements (Department of Environmental Affairs and Tourism, 2000) and 'covenants of mutual obligation' (Hooper, 2000) have been suggested for formalizing responsibility and accountability.

The need perceived from this research is for:

- improved vertical integration of management from government down to civil society;
- improved horizontal integration levels between government departments and between stakeholder groups among civil society;
- designation of the system (mountain and its surrounds)as an integrated system that requires integrated management; and
- diversification of tourism and livelihood options and strategies to promote sustainability in the face of quite rapidly changing circumstances.

The management framework (Figure 6.1) proposes a structure within which these needs can be met. However, for such a system to work, the Ministry of Natural Resources and Tourism will have to establish a mechanism for securing the necessary funds. Introduction of a 'users pay', tax would allow the structure to operate using dedicated funding.

6.5 Revisiting the model

The conceptual framework that was developed and used in this dissertation was a useful way of conceptualising tourism and local livelihood interventions. It advocates a strategy that should be adopted for better management of the mountain, and it led to a greater appreciation of the complexity of livelihood strategies, and this in turn, directed attention to the need for an integrated approach. The focus on people and their survival, gives a new and different emphasis to the strategy for the environmental conservation of the mountain. No longer is the emphasis on extending the area perceived as motivated by conservation or the interests of one government

agency; rather it is motivated by the need to sustain livelihoods through more appropriate conservation efforts. Application of the framework indicates a strategy that should be adopted for better management of the mountain; it demonstrates the role that tourism can play in the overall processes of sustaining local people's livelihoods; it shows a link between the key roles of national parks, tourism and the socio-economic and sustainable environmental management of the area. The framework has helped to expose evidence of conflicts and tensions among local people through an improved understanding of their livelihood strategies and their support for conservation.

However, Gentner and Stevens (1983) argue that it is cardinal to be mindful that mental models are always incomplete and constantly evolving as we interact with particular systems. The model initially, did not take into account the fact that most people including park staff, local people, tour operators and international and local tourists readily define their relationship with the mountain as a whole and not only the portion containing KINAPA. The model therefore shows that some of the assumptions were not correctly developed and therefore it needs to be refined. With the insights developed in this research, it would be desirable to restructure the framework in discussion with the various government departments and civil society. Such a framework would then act as the 'mental model' that would guide formulation and implementation of strategies to integrate the actions of parties as shown in figure 6.1.

CHAPTER 7
CONCLUSION AND RECOMMENDATIONS

7.1 Conclusions

This research set out to gain a better understanding of the attitudes and perceptions of porters and guides to KINAPA. It exposed something much more fundamental. By considering how porters and guides coped, the research developed a first insight into the complexity of survival strategies among people living around Mount Kilimanjaro. It showed that whilst they, of necessity, adopted integrated strategies over time scales ranging from seasons to life spans, and over spatial scales from the mountains to their fields or homesteads, those who administer 'the mountain' do so in an unintegrated way. The research suggests that because of global climate change, there may be very significant risks to eco-tourism on the mountain, and there is therefore an urgent need for a more integrated and proactive approach to sustaining tourism.

Sustaining tourism and reducing financial leakage are seen to be central to improving the livelihoods of local people. This in turn is perceived to be critically dependent on an integrated approach to management. A proposal for an integrated management structure is made. Many recommendations could be made. However, they appear to all depend ultimately on whether or not the mountain and its surrounds are conceptualised as being a single integrated system. Ironically, this seems to be how everyone except the management agencies perceive it to be. Thus the recommendation made here is that government gives immediate attention to establishing a single agency for being responsible in planning the management of Mount Kilimanjaro. This single agency would be required to provide visionary leadership and integrated participatory management for the mountain system which would incorporate social, economic and environmental considerations.

The framework developed and used in this study has demonstrated potential contemporary conservation and management challenges of Mount KINAPA. It has successfully explored the existing dilemma and sought a way forward for the benefit of current and future generations and the integrity of the park. Apart from the framework, the conclusive approach of this study is based on evidence from multiple sources of information.

The study found a wide and complex range of livelihood strategies which are used by local people to meet their day-to-day household needs in order to minimise risks. It shows that assessing the livelihood impacts of tourism is not a matter of merely counting employment or wage incomes but is rather a matter of assessing factors affecting livelihood security, complexity and sustainability. The study exposed the narrow judgment of local benefits focusing only on job creation and cash income. Jobs in mountain tourism were seen as popular 'quick money work' that pay more within a short period of time and is more prestigious than traditional labour-intensive activities. Tourism rather than other types of employment is easier to integrate with contemporary livelihoods, because some jobs are near home so livestock keepers and crop producers, for example, can continue to perform other livelihood activities while still active in the tourism industry.

Although individuals within the community were already dealing with a complex combination of livelihood strategies to meet their household needs, porters and guides seem to recognise that, the park initiatives had created a kind of amity payment, which made more resources available to activities likely to be in their greatest interests.

Re-establishing a civil authority regime with clearly defined and agreed rights and responsibilities, is a necessary pre-requisite for achieving the intentions of an integrated mountain resource management. This would further provide local people with more direct representation in the park management decision-making process. As these institutions become informed by the community issues and concerns, they would begin to play new and more diverse roles which would create benefits and promote collaboration with the communities and with smaller, special interest groups. The strategy would also act as a vehicle for deepening democracy within the marginalised sector of society.

Experience has shown that national parks without the support of local people tend to require enormous investment in policing, which is unlikely to result in effective conservation. Conversely, strong support by the local people often leads to reduced costs, as local people act as unofficial and often unpaid-guardians of an area.

The propensity of communities to rely upon the fiscal benefits and development assistance from the Kilimanjaro mountain systems for survival is strongly reflected in their wish to have the right to secure long term management of this area, the benefits to be derived from it, and their acceptance of the responsibilities related to their rights. The future support for the park will depend upon enhancing these benefits.

7.2 Recommendations

The Mount Kilimanjaro integrity has to be maintained. In the endeavour to conserve and protect its landscape, habitat, flora and fauna for the benefit of current and future generations, the following recommendations are put forth:

- The current paradoxical approach used to manage and conserve the whole mountain system to maintain tourism and local people's livelihoods has to change if the integrity of the mountain has to be maintained. The study provided a basis for creating practical recommendations for a way forward towards an integrated management strategy, which can complement or improve the effectiveness of the KINAPA system. The integrated management strategy proposed in Chapter 6 (Figure 6.1) should be implemented. This would further achieve the recommendation put forth by the World Heritage Site Convention (TANAPA, 1993). Having the entire mountain managed by one agency would reduce bureaucratic overlap and confusion and allow a more co-ordinated and efficient management of the mountain ecosystem.

- Although tourism is heavily depended on by respondents, one must not lose sight of the fact that tourism being prone to fickle catastrophes is subject to slump any moment. This shows that, portering and guiding in Kilimanjaro is not a long-term option for survival as tourism is seasonal and may be prone to many factors that may lead tourists not to come as elucidated in Chapter 4, Section 4.5.4. There is therefore a need for local people to invest resources obtained from tourism in boosting other economic and livelihood activities.

- Deterioration of the mountain in any way should not be taken lightly as it may in the long run affect the stability of the natural settings and the whole ecosystem and therefore encumber provision of opportunities to cater for human needs. All stakeholders should collaborate towards care of the mountain, as they all derive varied benefits from the mountain.

- Every sector should strive towards poverty alleviation. In order to encourage local people's support for the park, their major livelihood strategies must be studied and maintained. In many cases, important sectors, which are more traditionally depended on by rural communities, are the most neglected ones when it comes to addressing local people concerns. For instance, services such as extension, provision of agricultural implements, pesticides, seeds, loans etc. need to be enhanced by the respective sectors in order to supplement what the Ministry of Natural Resource and Tourism (MNRT) and its related institution (TANAPA) has being doing in support of local livelihoods in areas adjacent to national parks.

- More research is required which would inform an integrated and more holistic approach take a new look at more sustainable development. Particular attention should be given to integrating the conservation and development objectives in which livelihood needs would be encompassed.

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APPENDIX I

KILIMANJARO NATIONAL PARK; QUESTIONNAIRE SURVEY FOR PORTERS AND GUIDES

HIFADHI YA MLIMA KILIMANJARO; HOJAJI KWA VIONGOZI WA WATALII NA WABEBA MIZIGO

September 2001

Guide □ **Porter** □

Researcher's introduction

My name is Betrita Loibooki; currently undertaking a master's programme in Environment and Development at the University of Natal- South Africa. As part of my studies, I have chosen to explore the situation of porters and guides in relation to tourism activities around Mount Kilimanjaro National Park. You have been identified as part of the respondents because of the nature of your work. Please assist by filling this questionnaire. The study is designed to help Kilimanjaro National Park and TANAPA at large, together with other stakeholders to gain insights into how the benefits accrued from tourism can influence relationship between the park management and the adjacent local people over maintaining the integrity of the park. The findings of the study has the potential to contribute towards future plans concerning the porters and guides work around Mount Kilimanjaro in order to ensure sustainability of the park and wise use of its resources.

Utangulizi wa mtafiti

Jina langu ni Betrita Loibooki, nasomea shahada ya Mazingira na Maendeleo katika Chuo Kikuu cha Natal, Africa Kusini. Kama sehemu tu ya mafunzo yangu, nimechagua kufanya utafiti kwenye eneo la wabeba mizigo na viongozi wa watalii katika mlima Kilimanjaro. Umechaguliwa kama sehemu ya wahusika na kazi hii kusaidia kutoa taarifa kamili zinazohusiana na kazi yako kwa kujaza fomu hii ya maswali. Tafadhali naomba ujaze fomu hii kwa makini na usahihi. Matokeo ya utafiti huu yamelenga katika kusaidia hifadhi ya mlima Kilimanjaro na shirika la TANAPA kwa ujumla na washika dau wote, kupata mwanga wa hali halisi ya faida zipatikanazo katika utalii wa mlima Kilimanjaro kwa wananchi na jinsi faida hizi zinavyoweza kushawishi mahusiano mazuri kati ya utawala wa hifadhi na wananchi waishio pembezoni mwa mlima. Mahusiano hayo yanalenga katika kuongeza juhudi madhubuti zitakazopelekea uhifadhi sahihi wa mlima Kilimanjaro. Kadhalika matokeo ya utafiti huu yatasaidia kuboresha hali ya kazi ya wabeba mizigo na viongizi wa watalii kati ka milima Kilimanjaro na hivyo kuongeza juhudi za wananchi katika kuhifadhi milima huu kwa manufaa yao wenyewe na ya vizazi vijavyo.

Section one: Sehemu ya kwanza

This section requires you to provide information concerning yourself and your work. Please fill in the blank spaces provided and/or tick '√' as you feel appropriate.

Sehemu hii inahitaji kujaza taarifa za kukuhusu wewe binafsi na kazi yako. Tafadhali jaza nafasi zilizoachwa wazi kwa kuweka alama '√' au toa majibu mafupi kulingana na swali.

1. (a) Sex: Male □ Female □ (c) Age: .....

(d) Married □ Single □ Widowed □ Divorced □

(a) Mume □ (b) Mke □ (c) Umri: .....

(d) Umeoa/umeolewa □ Sijaoa/sijaolewa □ Nimeachika □ Mjane □

2. Indicate your work .....

Taja kazi yako: .....

3. Place of birth: Region: ..... District: .....

Ulikozaliwa: Mkoa: ..... Wilaya: .....

4.What is your responsibility in the household?

Child □ Father □ Head of the house □

Wajibu wako ni nini kwenye familia/kaya yako?

Mtoto □ Baba □ Mtegemewa □

5. What level of education have you reached?

Primary school □ Secondary school □ Tertiary □ Adult education □

Never been to school □ Others; specify:.....

Una kiwango gani cha elimu?

Elimu ya msingi □ Elimu ya sekondari □ Chuo kikuu □ Elimu ya watu wazima □

Sijawahi kwenda shule □ Elimu nyingine; taja:.....

6. (a) What are the ways that you personally and your household make a living?

Cropping □ Livestock keeping □ Pottering □ Guiding □ Casual labour in the park □ Small business □ Others: specify □

Ni njia zipi wewe na familia yako mnatumia kujipatia matumizi kwa ajili ya maisha?

Kilimo □ Ufugaji □ Kubeba mizigo ya watalii □ Kuongoza watalii

mlimani □ Kibarua wa hifadhi □ Biashara ndogondogo □ Nyingine;taja:.....

7. How did you get to know about the work of porters and guides?

Through a friend/relative □ Publicity □ I stay in the park □

Park employee □ Other means: specify.....

Ulipataje taarifa ya kazi hii ya kuongoza watalii/kubeba mizigo ya watalii mlimani?

Kupitita rafiki/ndugu □ Matangazo □ Naishi kambini KINAPA □

Mtumishi wa KINAPA □ Njia nyingine; tafadhali zitaje:.....

8. Who is your employer?

KINAPA □ Tour operators/hoteliers □ Self employed □

Others: (specify).....

Nani mwajiri wako?

KINAPA □ Kampuni ya Watalii/Hoteli □ Najiajiri mwenyewe □

Njia nyingine; taja .....

9. When (year) did you first climb the mountain as a porter/guide? .....

Ulianza kupanda mlima na watalii kuanzia mwaka gani? .....

10. Where else do you do porttering or guiding work?

Mount. Meru □ Savanna parks □ Cultural tourism □

Others: specify.....

Ni mahali gani tena unafanya kazi ya kubebe mizigo /kuongoza watalii?

Mlima Meru □ Hifadhi nyingine za taifa □ Utalii wa mila vijijini □

Maeneo mengine: taja: .....

11. What other work related to tourism or KINAPA do you do?

Tour driver □ Cook □ Campsite leader □ Casual work in the park □

Others: Specify .....

Taja shughuli nyingine yoyote unayofanya inayohusiana na utalii au hifadhi ya Kilimanjaro.

Dereva □ Mpishi □ Mpiga hema □ Kibarua wa hifadhi □ Kuuza bidhaa kwa watalii □

Nyingine; taja: .....

12. How does pottering and guiding compare with other activities in terms of income generation?

Very good □ Good □ Fair □ Bad □

Unailinganishaje shughuli ya kubeba mizigo/ kuongoza wageni mlimani na shughuli nyingine kwa ajili ya kujipatia kipato?

Nzuri sana ▯ Nzuri ▯ Ya kawaida ▯ Mbaya ▯

Section two: Sehemu ya pili

Work opportunities: Nafasi za kazi na shughuli nyingine za kukuingizia kipato

This section addresses perceptions concerning work opportunity and other income generating activities. Please tick the appropriate answer, and/or give explanations on the provided spaces.

Sehemu hii inahusu nafasi za kazi na shughuli nyingine zinazokuingizia kipato. Tafadhali chagua jibu moja sahihi au toa jibu kulingana na swali.

13. Given the high level of competition to work as porters or guides, who among the following should have priority?

Someone born here □ Experienced persons □ Starters □

Local residents regardless of place of birth □ Others: Specify: .....

Kutokana na ukosefu wa kazi na wingi wa watu, watu gani wapewe kipau mbele kufanya kazi hii ya utalii?

Mzaliwa wa eneo hili ▯ Mtu mwenye uzoefu wa kazi ▯ Wale wanaoanza kujifunza kazi ▯ Mwenyeji bila kuchagua alikotoka ▯ Wengine, taja: .....

14. On average, how much income (in US$) do you get each time you climb the mountain?

Porter's salary ..... Tips.....

Guide's salary.....Tips.....

Kwa wastani, ni kiasi gani cha mapato (kwa dollar za Kimarekani) unachopata kila unapopanda mlima?

Mshahara kwa wabeba mizigo ..... Tipu: .....

Mshahara kwa waongoza watalii .....Tipu: .....

15. Does the income from mountain climbing suffice the demands of your household?

Yes □ No □

In either case, please explain how does it or does not surfice .....

Je? Kipato unachopata kutokana na utalii kinakidhi mahitaji yako na familia?

Ndiyo ▯ Hapana ▯

Tafadhali eleza kwa vipi kipato hicho kinavyotosheleza au kisivyotosheleza.....

16. How would you rate the contribution of income acquired through working as a potter or guide to your household livelihood?

Entire income □ Major income □ Average income □ Minor □

Unapangiliaje kipato kitokanacho na kazi yako kukidhi matumizi ya familia yako?

Mshahara wote □ Kiasi kikubwa cha mshahara □ Wastani □ Kiasi kidogo tu □

17. List the major four priorities on which you spend the money you generate from mountain climbing?

1……. 2……..……3……4……..……..

Orodhesha maeneo manne muhimu unayotumia mshahara wako unaopata kutokana na utalii.

1.....2.....3.....4.....

18. Apart from money, do you get any other benefits from working as a potter/ guide?

Yes □ No □ If yes, give examples:……..

Mbali na fedha je, kuna kitu gani kingine unachopata kutokana na kubeba mizigo au kuongoza watalii? Ndiyo □ Hapana □

Kama ndiyo, toa mfano wa vitu unavyopata: .....

19. How would you rank the benefits you accrue from KINAPA tourism?

Very little □ Fair □ Sufficient □ Very sufficient □

Unaelezeaje manufaa unayopata kutokana na utalii wa mlima Kilimanjaro?

Ni kidogo sana □ Ni ya kawaida □ yanatosheleza □ yanatosheleza sana □

Section three and four: Sehemu ya tatu na nne

Park management issues and training: Maswala ya uhifadhi na mafunzo

In this section, give your recommendations on how better the mountain Kilimanjaro should be managed in order to improve your working condition and that of the park management while maintaining visitor satisfaction. About training, please tick on the correct answer and/or give explanation on the provided blank spaces.

Katika sehemu hii unatakiwa kutoa maoni yako kuhusu jinsi gani mlima Kilimanjaro uhifadhiwe ili kuimarisha hali yako kikazi, kazi za uhifadhi na utawala pamoja na kutosheleza mahitaji ya watalii. Kuhusu mafunzo, tafadhali weka alama kwenye jibu sahihi au toa jibu sahihi kulingana na swali.

20. Do you like tourists? Yes □ No □ In any case specify why: .....
Je? unapenda watalii? Ndiyo □ Hapana □
Elezea sababu gani unapenda au huwapendi watalii: .....

21. What could the tourist who climbs the mountain do to make your job easier?
.....
Ni kitu gani unafikiri watalii wangefanya ili kurahisisha kazi yako?.....

22. What good things do the park do to help local villagers? .....
Ni vitu gani vizuri hifadhi inafanya kusaidia wanavijiji?.....

23. What is the general feeling of the local people about conservation of mountain Kilimanjaro?
Very supportive □ Supportive □ not supportive □
Tafadhali elezea jinsi gani wanavijiji waishio pembezoni mwa hifadhi wanavyosimulia manufaa ya mlima Kilimanjaro:
Wanaunga sana mkono uhifadhi □ Wanaunga mkono uhifadhi □ Hawapendi maswala ya uhifadhi □

24. What other benefits do you and the community get due to the presence of the mountain and the natural forest?
.....
Ni manufaa yapi mengine wewe na wanavijiji mnayopata kutokana na kuwepo kwa mlima na msitu wa Kilimanjaro?.....

25. Should the communities have access to development assistance from the park?
Yes □ No □ Why should they have access?.....
Je, wananchi wanastahili kupata msaada wa maendeleo kutoka hifadhini?
Ndio □ Hapana □ Kwa nini wanastahili: .....

26. Please recommend what should the park officials do to make your job as a porter/ guide easier? .....

Viongozi wa hifadhi wangefanyaje ili kuboresha na kurahisisha kazi yako?.....

27. If you were the park warden in charge of Kilimanjaro, what 4 important aspects will you address to ensure better management of the area?

1.....2.....3.....4.....

Kama ungekuwa mhifadhi mkuu wa KINAPA, ni mambo gani manne muhimu ungefanya ili kuhakikisha uhifadhi bora?

1.....2.....3.....4.....

28. Have you had any training on the procedures for pottering/ guiding?

Yes ☐ No ☐ If yes, who provided/ facilitated this training .....

and for how long? .....

Ulishawahi kupata mafunzo yoyote kuhusiana na taratibu za kazi yako?

Ndiyo ☐ Hapana ☐ Kama ndiyo, nani alitoa mafunzo hayo? .....

Yalikuwa ya muda gani? .....

29. How would you describe the outcome of the training in relation to your skills as a porter/ guide? Excellent ☐ Good ☐ Fair ☐ Poor ☐

Enaelezeaje matokeo ya mafunzo hayo kuhusiana na kazi yako.

Mazuri sana ☐ Mazuri ☐ Ya kawaida ☐ Hayafai ☐

30. Do you feel you need any training in the future?

Yes ☐ No ☐ Give the reasons .....

Unafikiri unahitaji mafunzo kwa baadaye?

Ndiyo ☐ Hapana ☐ Elezea kwa nini.....

END

Appendix II: Guides and Porters Who Climbed in September 2001

Dates	Guides	Porters	Total
1.9. 2001	5	45	51
2.9.2001	8	41	49
3.9.2001	11	91	102
4.9.2001	6	27	33
5.9.2001	10	75	85
6.9.2001	7	54	61
7.9.2001	11	125	136
8.9.2001	10	60	70
9.9.2001	8	49	57
10.9.2001	13	132	145
11.9.2001	17	93	110
12.9.2001	4	25	29
13.9.2001	5	20	25
14.9.2001	8	62	70
15.9.2001	9	55	64
16.9.2001	12	83	95
17.9.2001	14	146	160
18.9.2001	12	72	84
19.9.2001	11	80	91
20.9.2001	8	58	66
21.9.2001	7	65	72
22.9.2001	14	100	114
23.9.2001	13	104	117
24.9.2001	15	192	207
25.9.2001	12	70	82
26.9.2001	13	109	122
27.9.2001	8	34	42
28.9.2001	11	54	65
29.9.2001	9	47	56
30.9.2001	14	124	138
Total	303	2,293	2,598
Percentage	12%	88%	100%

Source: KINAPA: Marangu & Mweka

Appendixes III: Tanzania National Parks 2001/2002 CCS budget

National Park	Amount in Tanzanian shillings
Arusha	39,170,000
Gombe	12,249,000
Katavi	28,835,000
Kilimanjaro	69,834,000
Lake Manyara	42,044,000
Mahale	19,519,000
Mikumi	55,917,000
Ruaha	53,643,000
Rubondo	29,500,000
Serengeti	120,000,000
Tarangire	60,792,000
Udzungwa	29,957,000
Total	561,460,000

Source: TANAPA office files