Understanding the Impact of Tourism Revenue Distribution on Communities living in Bazaruto Archipelago National Park (BANP), Mozambique

University of KwaZulu-Natal
Master of Agriculture
(Agricultural Extension and Rural Resource Management)

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Submitted in partial fulfillment of a Master of Agriculture (Agricultural Extension and Rural Resource Management) in the School of Agricultural Science and Agribusiness in the Faculty of Science and Agriculture, University of KwaZulu-Natal, Pietermaritzburg, South Africa 2010
DECLARATION

I declare that this thesis hereby submitted in partial fulfillment of a Master of Agriculture (Agricultural Extension and Rural Resource Management) in the School of Agricultural Sciences and Agribusiness in the University of KwaZulu-Natal, Pietermaritzburg, is my own work. The work of other authors used in thesis are duly cited and referenced. This thesis has not been submitted by me to any other university or faculty.

Ricardina Guivala Matusse  
Candidate

Date:

Dr. Steven Worth  
Supervisor

Date:
DEDICATION

This thesis is dedicated to the memories of my beloved late parents

my mother
LIDIA PARRUQUE

and

my father
CESAR GUIVALA.

Through their encouragement, sacrifices and support they taught me to be confident and persistent in my studies since I was young.

My Almighty GOD protects and blesses them.
ABSTRACT

The Bazaruto Archipelago National Park (BANP) is one of the two marine National Parks in Mozambique. It was established to protect marine and terrestrial resources and to provide a basis for social and economic development of the communities associated with the park. However, after four decades of successful tourist-attracting operation, the communities are still struggling. Poverty, lack of diversified livelihoods, poor soil fertility, lack of education, unemployment and lack of income generation continue. These lead to a reduction of the very natural resources the park was established to protect. They lead also to less sustainable and more vulnerable community livelihoods and a decline in community development.

This study, which is the first of its kind on Bazaruto Island, evaluated tourism revenue distribution on communities through assessing its social, economic and conservation impacts on the island. The study also investigated how tourism revenue is distributed and managed and the role of the various stakeholders. The study reveals that tourism revenue distribution has not yet demonstrated substantial tangible impacts on communities. Limited improvement was found in three areas: education, micro-finance for projects and community conservation. However, on the whole, the communities remain poor and jobless; their homes are still in poor condition and subject to weather damage.

The study suggests that there are two key factors that have limited progress on Bazaruto Island. Communities have spent their tourism revenue on providing public goods (infrastructure and education) which are government responsibilities. Further, there is a practical tension between conservation and livelihoods which is related to the use of tourism revenue for social infrastructure instead of expanding livelihoods. The primary message of the park is about conservation, but there is no real effort to create alternative livelihoods; communities are forced to set aside conservation in favor of basic survival. There is an urgent need to investigate alternative livelihoods for the communities and to formulate policy and programs to ensure that while the goal of conservation is met, communities also see substantial improvements to their livelihoods and general quality of life.
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This study made possible, in part by assistance from Bazaruto Archipelago National Park Management; Dr. Rafael Funzana (Park Warden), Mr. Rodrigues Muchine (Community officer), Josefa Mubalo (Administrator) and all BANP staff, by important and useful information they gave during my data collection as well as the wonderful accommodation and administrative support. I pass my thanks to Dr. Afonso Madope (Coordinator of Limpopo Transfrontier Conservation Areas-MITUR), who provided me important information for my study.

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<tr>
<td>AFD</td>
<td>Agency Françoise Development</td>
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<td>ART</td>
<td>African Resource Trust</td>
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<tr>
<td>BANP</td>
<td>Bazaruto Archipelago National Park</td>
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<tr>
<td>BR</td>
<td>Boletim da Republica (Government Gazette)</td>
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<tr>
<td>CBNRM</td>
<td>Community-Based Natural Resource Management</td>
</tr>
<tr>
<td>CRC</td>
<td>Committee on the Rights of the Child</td>
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<tr>
<td>DFID</td>
<td>Department for International Development (UK)</td>
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<tr>
<td>DNAC</td>
<td>National Directorate of Conservation Areas</td>
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<tr>
<td>DNFFB</td>
<td>Direção Nacional de Florestas e Fauna Bravia (National Directorate of Flora and Fauna)</td>
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<td>DPT</td>
<td>Direção Provincial do Turismo (Director of Provincial Tourism)</td>
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<tr>
<td>FRELIMO</td>
<td>Frente da Libertação de Moçambique (Liberation Front of Mozambique)</td>
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<tr>
<td>FUTUR</td>
<td>Fundo do Turismo (Tourism Fund)</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>INE</td>
<td>Instituto Nacional de Estatistica (Institute of National Statistics)</td>
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<tr>
<td>IUCN</td>
<td>International Union for Conservation of Nature</td>
</tr>
<tr>
<td>MCEA</td>
<td>Ministry for the Coordination of Environmental Affairs</td>
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<tr>
<td>MITUR</td>
<td>Ministry of Tourism</td>
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<tr>
<td>NASCO</td>
<td>Namibian Association of CBNRM Support Organizations</td>
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<tr>
<td>NGO</td>
<td>Non-Governmental Organization</td>
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<td>PARPA</td>
<td>Program and Action Plan for Poverty Reduction</td>
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<tr>
<td>RENAMO</td>
<td>Resistencia Nacional de Moçambique (National Resistance of Mozambique)</td>
</tr>
<tr>
<td>TYA</td>
<td>Thomba Yedho Association</td>
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<tr>
<td>UN</td>
<td>United Nations</td>
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<td>UNEP</td>
<td>United Nations Environmental Program</td>
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<td>World Tourism Organization</td>
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CHAPTER 1 INTRODUCTION

1.1 Introduction

Tourism in protected areas plays an important role in the economy of Mozambique. It is anticipated that tourism activities and the money it attracts will contribute significantly to the development of the people who live in or near these protected areas – people, who in many cases have been displaced in order to make way for the creation of the park (Ministry of Tourism, 2004). The Bazaruto Archipelago National Park (BANP) is a protected area and is one of two marine National Parks in Mozambique. It was established to protect marine and terrestrial resources and to provide tourism activities that would generate income that could be channeled into the development of the communities associated with the park (WWF, 2006). However, despite BANP being operation for forty years, drawing many tourists, it appears that these communities not have benefited significantly. Poverty, lack of diversified livelihoods, poor soil fertility for agriculture, lack of education, unemployment and lack of income generation continue; this, paradoxically, leads to a reduction of the very natural resources the park was established to protect. It leads also to more vulnerable and thus less sustainable community livelihoods and to a decline in community development.

This study explores the social, economic and conservation impact of tourism revenue distribution on communities living in the Bazaruto Archipelago National Park (BANP). The study will also show the tourism impact in the three aforementioned impact areas. This integration of these influences forms a complex context for community development in protected areas, such as the BANP. The study uses the framework of Baker (2000: 1) where the “evaluation (of a complex context) is intended to determine more broadly whether the program had the desired effects on individuals, households, and institutions and whether those effects are attributable to the program intervention”. As a part of the research, the study also investigated how tourism revenue is distributed and managed, and the role of the various stakeholders in the overall process.

A protected area is an “area of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and
managed through legal or other effective means”. Protected areas can be land or marine areas (IUCN, 1994: 7). Protected areas can also contribute to the social and economic development of the communities living in and around those protected areas. A strategy to achieve this is the use of revenue generated by tourism activities in the context of sustainable natural resources use (Novelli & Scarth, 2007). This renders protected areas a unique aspect of community development. Furthermore, protected areas can generate socio-economic benefits for communities through community-based conservation by resident communities directly involved in conservation activities. The economic benefit of biodiversity and ecosystem services can be accrued as a direct value, such as, sales of meat, hides, skins, trophies, education, tourism and research activities; and an indirect value, such as storm protection and climatic control (Emerton, 1999).

According to Drumm (2003), tourism in protected areas can be a mechanism for economic growth and community development; and is key to supporting biodiversity conservation. Tourism activities in protected areas have the potential to generate a continuous flow of revenue to be channeled into community development. Revenue can be from entrance fees, overnight camping and other accommodation facilities; use of equipment and recreational and educational facilities; use of park transport; and from photography, game driving, game walks, canoe and boat safaris, and other recreational activities (Novelli & Scarth, 2007). If the distribution of tourism revenue to communities is equitable, tourism can contribute to conservation and create opportunity for generate economic benefits (Goodwin, 2002). Additionally, tourism could be an alternative to provide employment opportunities; increase income for community livelihoods and increase public awareness of biodiversity conservation (Blom, 2000). The complexity of an integrated context suggests that management of tourism in protected areas presents great challenges and opportunities at the same time.

1.2 Study area and context

Protected areas in Mozambique enable the conservation of ecosystems, habitat, biodiversity and natural resources, for the benefit of present and future generations. Furthermore, protected areas can contribute to socio-economic development and increase the livelihoods of communities
living inside and on the buffer zones of these areas. There are about 120,000 people living in protected areas in Mozambique (Ministry of Tourism, 2006). The fundamental and multi-faceted goal is to turn protected areas into a significant contributor to the socio-economic development of the country, for the benefit of the communities living in and around the protected areas, primarily by generating employment and wealth to contribute to poverty reduction (Ministério do Turismo, 2009).

1.2.1 Bazaruto Archipelago National Park (BANP)

BANP was created in 1971 to protect the marine and terrestrial ecosystems of the archipelago. The marine system comprises a diversity of nationally endemic species such as dugongs, marine turtles, dolphins, sharks, coral reefs, whales. The terrestrial ecosystems comprise endemic species of gastropods and lizards; and of vegetation, such as mangroves. It is also an important bird area. Various stakeholders including the national government, Endangered Wildlife Trust, WWF, the local communities and tourism operators were all involved in establishing the BANP.

The BANP covers an area of 1,430 km², and includes five islands: Bazaruto, Benguerua, Magaruque, Santa Carolina and Bangue (WWF, 2002). Bazaruto is the largest island and partly serves as the headquarters. BANP administratively falls within the Inhambane Province and is split between Vilanculos and Inhassoro Districts, lying about 30-35 km off the coast in Vilanculos (WWF, 2006).

About 3,500 people, distributed across seven local communities, live in the park. They are extremely poor and dependent on local natural resources for survival. Most inhabitants are fishermen; over 70% of families derive income from small-scale fishery activities, gathering of sand oysters and other marine resources. These communities also raise goats and some cattle. They use palm leaves to make mats and baskets for sale to hotels and tourists and to make traditional wine know as “utchema” (WWF, 2006). Women practice small-scale agriculture. Poor soil fertility and the conservation policy governing BANP, limits land-use and restricts agriculture inside the park (WWF, 2006).
In keeping with the policy for protected areas in Mozambique, the objective in establishing BANP was to ensure tourism development, environmental conservation and local community benefits from tourism revenue (WWF, 2002).

1.3 Description of the problem

This study aims to understand the impact of tourism revenue distribution on communities through its economic, social and environmental impacts. To improve the livelihoods of communities, BANP management, through a gazetted legal framework, distributes a share of tourism revenues to the communities in the archipelago. The distributed funds are intended to serve as an incentive for communities to implement sustainable management of natural resources, and thereby contribute to the conservation objectives for the park (WWF, 2006).

There is no clear policy governing how the distributed tourism revenue is to be spent by the communities.

The Mozambican government, through a legal framework (Decree of 12/2002; law 10/99 of Act 102 of 1999) established that 20% of tourism revenue generated in protected areas would be distributed to the affected local communities for development (Mozambique Government, 2004). Although the law was passed in 1999, it only came into effect in 2006. In 2003, before Act 102 was implemented, BANP started to collect tourism revenue from the hotels on Bazaruto Island. A total of US$35,841 was collected and distributed to the three island communities, Sitone, Zenguemelo and Pangaia. Revenue distribution was informal, and 50% of the total revenue was allocated to communities. Different operators managed the funds differently, some transferring these directly to communities, while others deposited with the BANP. Some distributed the fund regularly, while others withheld the money. From 2006 to 2009, after Act 102 was implemented, a total of US$31,350 was allocated to the three communities. Thus during 2003-2009, the total collections and distributions were US$67,191 (Funzana, 2009).

According to the WWF Bazaruto Project Plan of 2006 (WWF 2006), despite tourism activities in the BANP and income for community benefit, the tourism revenue distributed to communities did not appear to be positively benefitting households in the area. Despite the collection,
distribution and use of tourism revenue funds, households in the receiving communities still lived in poverty. There was a need to explore the main causes for the apparent lack of real benefits reaching the households. The 2006 WWF report offered little insight, although it was indicated that stakeholder transparency, among hotels, BANP management and the communities needed to improve. Furthermore, it was stated that funds should be used to improve communities economically, through improved livelihoods, socially and environmentally. Beyond this, the report offered no answers and no study was done, even though solving the problem was considered important. The researcher for this study believed that research into this situation could contribute to making the tourism revenue policy more effective in improving the lives of the people living in and around protected areas.

1.4 Scope and delimitation of the study area

The study was conducted on Bazaruto Island; it does not cover the other four islands. The study area was selected based on three factors. Firstly, BANP was the first park to implement the policy of 20% of tourism revenue to the communities. Secondly, BANP has the longest history of community remuneration and could provide the richest source of data required for this study. Finally, for the BANP to meet its conservation goals, it would be necessary to improve the management of natural resources by local communities, in turn enabling local communities to achieve improved incomes and living standards. This study could contribute to that process (See chapter 3).

1.5 Research Aims and Questions

The assessment of how tourism revenue distribution has impacted recipient communities affecting the economic, social and conservation situation on Bazaruto Island is examined. Thus, the primary research question is: What has been the impact of the tourism revenue distribution program on the communities of Bazaruto Island?
The aim of the study was to understand impacts from the community perspective. It is largely a descriptive study intending to capture stakeholder perceptions, of benefits, rather than attempt to quantify these.

The study was designed to address three questions:

- What are the economic impacts of tourism revenue distribution on communities?
- What are the social impacts of tourism revenue distribution on communities?
- What are the tourism revenue impacts on community conservation?

The study identifies key stakeholders in the protected area, identifies and evaluates benefits accruing to local communities from tourism revenue for economic and social development and assesses how tourism revenue has influenced the way communities use and manage their natural resources.

Tourism revenue history is explored to identify the evolution and general perception of key operations and benefits of the program. Economic impacts on activities, such as changes in livelihoods, job opportunities, micro-finance for income-generation and commerce were explored. Social impacts explored were education, health care, social infrastructure, transport and water supply. Conservation impacts explored were community perceptions around marine and terrestrial resource impacts.

The data generated will be used to inform and improve the current and future application of the tourism revenue distribution policies, thereby, enabling communities to see meaningful positive change through participation in the program.

1.6 Research Methodology

Details of research method and study area are discussed in Chapter 3 & 4. This is primarily a qualitative study using research questionnaires administered to individual community members, focus group discussions, key informant interviews, direct observation and the examination of
existing government and public documents. Data were analyzed using quantitative and qualitative methods.

Seventy-seven individuals selected by both purposive and snow ball sampling methods completed the questionnaires. The focus of the questionnaire was to understand community perceptions around tourism revenue policy impacts.

Three different focus groups discussions were held to obtain additional insights into the perceptions around tourism revenue policy impacts. The discussions enabled all participants to give more relevant information and a broader audience was reached. The discussions also promoted the exchange of different group member experiences and focused on proposing alternative solutions to the present situation to improve the use of tourism revenue to uplift community member livelihoods. Additionally, the discussion was focused on identifying strengths and weaknesses, and opportunities for participants to derive benefits (The World Bank, 2004).

Semi-structured, key-informant interviews were used to gather information from those familiar with and knowledgeable about the BANP history of the area, or past situations. The focus of these interviews was to ascertain how tourism revenue had been used and to what extent it impacted communities.

Direct observation focused on infrastructure, conservation, livelihoods and quality of lifestyle in the three communities. It was conducted generally during walks between interviews and included written notes and digital images. It was used to capture a sense of the context of the area to be combined with the other data collected.

The study also included a review of state and public reports, gazette regulations, policy documents, commissioned studies, annual plans and reports and other stakeholder reports. This data augmented and aided in the verification of the field data.
1.7 Thesis structure

The study has five chapters. In Chapter One the topic and research questions are introduced and the study background, problem description, research methods and scope and limitations of the study described. A literature review providing the context and theoretical framework for the research is presented in Chapter Two. The economic, social and conservation issues relevant to the study are discussed, and the framework for interpreting the findings of the study provided. The general description of Mozambique and a more detailed description of the study area, including the park as a whole, and Bazaruto Island specifically are provided in Chapter three. The research methods and selection criteria for the different groups including sampling and data analysis are discussed in Chapter Four. The findings of the study are presented in Chapter Five; and some analysis and initial interpretations are offered. In Chapter Six a discussion of the findings and some conclusions in the light of literature are presented along with the limitations of the study and recommendations for further research.
CHAPTER 2 LITERATURE REVIEW

The context of this study is tourism in protected areas. Therefore the review of literature will start with a brief discussion about protected areas. It will then discuss tourism in protected areas, the role of tourism in poverty alleviation, the potential impact of tourism, and tourism and conservation. The review will then explore these themes as an integrated whole in which the interdependence of tourism, conservation and community development in the context of poverty alleviation be discussed creating the theoretical framework within which the study was conducted.

2.1 Understanding protected areas

The International Union for Conservation of Nature (IUCN) (1994:7) defines a protected area as an “area of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means”. Protected areas can be terrestrial or marine. Marine Protected Areas (MPAs) are defined as areas of the marine environment specifically dedicated to the protection and maintenance of marine biological diversity and “managed through legal or other effective means” (IUCN, 1994: 7).

In response to the growing number of “protected” areas and to establish common standards and terminology, the IUCN further refined the definition of protected areas by defining six categories of protected areas according to their key objectives (Dudley, 2008). (Table 1).

In practice, all categories of protected areas, except Ia, are commonly involved in tourism-related activities. Category Ia is used strictly for scientific purposes and tourism is generally strictly controlled and limited in such protected areas. (Dudley, 2008). Similarly, although the IUCN category descriptions do not specifically mention biodiversity, in practice conserving biodiversity is the principal function of protected areas (Dudley, 2008).
Table 1. Categories of Protected Areas

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Strict Nature Reserve/Wilderness Area: Protected area managed mainly for science or wilderness protection.</td>
</tr>
<tr>
<td>Ia</td>
<td>Strict Nature Reserve: Protected area managed mainly for science.</td>
</tr>
<tr>
<td>Ib</td>
<td>Wilderness Area: Protected area managed mainly for wilderness protection.</td>
</tr>
<tr>
<td>II</td>
<td>National Park: Protected area managed mainly for ecosystem protection and recreation.</td>
</tr>
<tr>
<td>III</td>
<td>Natural Monument: Protected area managed mainly for conservation of specific natural features.</td>
</tr>
<tr>
<td>IV</td>
<td>Habitat/Species Management Area: Protected area managed mainly for conservation through management intervention.</td>
</tr>
<tr>
<td>V</td>
<td>Protected Landscape/Seascape: Protected area managed mainly for landscape/seascape conservation and recreation.</td>
</tr>
<tr>
<td>VI</td>
<td>Managed Resource Protected Area: Protected area managed mainly for the sustainable use of natural ecosystems.</td>
</tr>
</tbody>
</table>

(Source: adapted from IUCN, 1994)

While there is a general acceptance of the IUCN categories, countries do not always adhere strictly to the categories or descriptions as specified in Table 1. For example, the United Kingdom has protected areas designated “national parks”. By definition these should be Category II protected areas, so human settlement should not be permitted inside the parks and resources should not be exploited. However, in practice, human settlements are permitted inside national parks in the UK and resources are exploited. Such protected areas should be placed under category V. Similarly, in South America, about 84% of national parks (Category II) have a significant number of people living inside the boundaries (IUCN, 1994).

Protected areas are often surrounded by an area referred to as a buffer zone. This is another approach in dealing with the practical reality of the interfacing of human and ‘protected area’ systems. Buffer zones are designed to maintain the ecological security of protected areas to restrict human activities to buffer areas; this could provide benefits to local communities (Neumann, 1997). However, as with protected area categories, in practice the buffer zones are not always strictly applied. The development of international terminology and standards is an evolutionary process. The realities in different countries limit the ability to conform to the proposed standards. However, the terminology and standards are useful for sharing, learning and understanding across the globe (Dudley, 2008).
For the purpose of this thesis, a ‘protected area’ is defined as a specifically demarcated area of land or water with the primary objective to conserve biodiversity. As this study will show, the conserved biodiversity context is intimately interwoven with community development issues, BANP being a case in point. It is a national park (Category II protected area), but it was established around existing communities unable to be summarily removed simply to comply with a ‘definition’. Its primary aim is the conservation of biodiversity, but it must accommodate the community inhabitants. This is not untypical of national parks globally. Hence a broader definition of a protected area may be useful.

2.1.1 History and evolution of protected areas

The concept of protected areas began in the 1800s when kings and other national rulers in Europe established protected areas; the only objective was hunting. Gradually, these areas started being visualized as having public use, thus creating the opportunity for community involvement in management and tourism activities (Eagles et al 2002).

In 1872, the first national park was established with the dedication of the Yellowstone National Park in the United States for public enjoyment and benefit (Eagles et al 2002:5). In 1879, the Royal National Park in New South Wales, Australia was established for biodiversity conservation and recreation purposes. In 1885, Canada established Banff National Park as public ground for the benefit and enjoyment of the local populace. In the 1900s, the establishment of protected areas extended globally with the number and extent of designated ‘protected’ areas increasing significantly. By 2002, around 44,000 sites were listed in the IUCN classification; these sites covered 10% of the land in the world (Eagles et al 2002). From 1970 to 2004, the total area has increased from 3 million km² to more than 20 million km² (Novelli & Scarth, 2007). These areas comprised some 100,000 protected areas globally and included national parks, reserves and sanctuaries, covering around 12% of the earth’s land surface (Schmidt-Soltau & Brockington, 2004). However, many of these protected areas are still under pressure of degradation and threats requiring intervention for improved management (Novelli & Scarth, 2007).
Similarly, the purpose for designating protected areas and the role of these areas have also changed over the years. About 100 to 150 years ago, during the creation and management of protected areas, people were not involved. People were seen as not part of nature, so were totally ignored. As protected areas evolved toward social and economic development, the trend was to integrate and harmonize the different complex social and development needs. Therefore, natural resources and people in collaboration could use protected areas as an important source for community development. (Schmidt-Soltau & Brockington, 2004).

2.1.2 Protected areas in Africa

Under colonial authorities, policies governing protected areas in Africa pursued biodiversity conservation and wildlife management to the exclusion of local communities. Inhabitants were removed from land without compensation or consultation and fences were erected. Top-down decisions were made for biodiversity conservation and effective wildlife management; but this management effort failed to deliver any meaningful economic or social benefits (Reid et al., 2004).

In the post-colonial era, particularly since the 1970s, protected area managers began to acknowledge the significance of the human dimension in protected areas, for example, community needs and community involvement in protected areas management (Reid et al., 2004). This example illustrates the change in attitude towards human rights in connection with land, including protected areas, previously or currently occupied.

According to Shackley (1996), protected areas in Africa were established for the conservation of flora and fauna for the benefit of the developed countries and businesses, rather than to benefit the local people. However, it is more common policy for protected areas in Africa to play an important role in encouraging local economic development with the local population being a direct beneficiary of commercial activities associated with the protected area (WES, 2002). Many protected areas in Africa are particularly attractive economically because of rare and large species. South Africa specializes in the market interested in the “Big Five”. Gorilla tourism in Rwanda, Uganda and D. R. Congo is an example of rare species tourism, attracting a large
number of visitors generating significant revenue income to those countries (Greer & Cipolletta, 2006). Most protected areas in Africa have limited finance to manage and conserve biodiversity as well as to pay salaries for staff and maintenance of basic administration activities. Some income is derived from entrance fees and tourism activities associated with the parks; and donations from individuals, foundations and international agencies (Spergel, 2001).

There is an historical disconnection between conservation and the inhabitants of protected areas in Africa. There is great potential for protected areas to benefit communities living in and around them, although this potential is yet to be realized. A survey of the literature suggests that there are a number of factors limiting the realization of the potential. These are the permanence of historical actions, weak policy and poor funding, all of these contributing to a lack of understanding of the potential economic and social benefits of protected areas.

2.1.3 Socio-economic impact of protected areas

Protected areas can generate socio-economic benefits to communities through community-based conservation and can be accrued directly and indirectly. Direct benefits include income from live sales, meat, hides, skins, trophies; income from employment in the protected areas; and income from research activities, education and tourism/ecotourism (including entrance fees and donations). Indirect benefits originate from sustainable resource use (Emerton, 1999; Shackley, 1996).

According to Novelli and Scarth (2007), protected areas could be the engine for wealth creation and poverty reduction, but as Schmidt-Soltau and Brockington (2004) argue that this has not been the result in some areas. Some protected areas have not reduced poverty but rather increased poverty in local households. For example, in Kenya, communities living around Ambosil Park, Samburu, Buffalo Springs and Shaba National Reserves were removed from their original land for conservation purposes, so they lost access to water and livestock grazing. Malindi and Watamu fishermen relinquished their fishing grounds to the marine parks. (Berger, 1998).
To be viable, protected areas have to be created to have positive socio-economic impacts on communities inhabiting and adjacent to those areas, with the affected communities benefiting more than other participants. The benefits could be through infrastructure development, such as schools, clinics, roads, buildings, housing and basic services, including electricity, water, communication systems, environmental service payments and secure resource use (Novelli & Scarth 2007). If local communities are empowered by participation in protected areas management, infrastructure development and tourism activities, increasing numbers of tourists may visit protected areas. This could result in increasing socio-economic benefits for both protected areas and participating communities (Barrantes, 2007).

2.1.4 Integration of protected areas and human systems: biodiversity and livelihoods

Globally, most of the land critical for biodiversity conservation is inhabited by local communities (Colchester, 1997/2000) and has been for thousands of years (Brandon et al, 1998). Historically, most parks and reserves have been subject to human use. Currently, the assumption is that local communities should not use the resources inside the parks and reserves for consumption and livelihoods (Dugelby & Libby 1998). Ghimire and Pimbert (1997/2000) argue that conservation programs have the double objectives of conservation and improving local community livelihoods and sustainable development. They argue further that this can be achieved through full community participation in projects involving natural resource management.

While the creation of protected areas such as parks and reserves are critical for biodiversity conservation, protected areas should also contribute to the livelihoods and well-being of local communities (Novelli & Scarth, 2007), including marine areas (Salm et al, 2000.). If not handled properly, the dual purpose of biodiversity conservation and livelihoods creates conflict in managing protected areas. Hence the need understand the integration of and find the balance between biodiversity conservation and the well-being of the communities associated with protected areas.
Conservation objectives entail some restrictions around resource utilization in protected areas where livelihoods demand resource use. Often, the inhabitants inside the area or in its buffer zone are poor and depend on natural resource usage for livelihoods (Novelli & Scarth, 2007). Given this practical reality, Ghimire and Pimbert (1997/2000) argue that protected areas are social areas representing a variety of cultural, aesthetic and spiritual values, thus embracing the idea that people are a part of nature. Development in protected areas is essential for communities if they are to progress economically and socially; and importantly, for the natural resources to be sustainable. Development can contribute towards improved infrastructure, such as lodges, campsites, power lines, communication system, access roads and clinics. All of these contribute to the social and economic development of the community (Ghimire & Pimbert, 1997/2000).

The creation of national parks has challenged communities, usually requiring changes in land use and exclusion from natural resource use within the boundaries of the park. It may result in population removals from the land to ensure conservation. Other challenges include livestock and livelihood losses if property is damaged by wildlife, and limitations are placed on traditional lifestyles (Makombe, 1993). Makombe further argues that previously little attention has been paid to the plight of inhabitants and communities have rarely benefited from designated national parks. He suggests that tourism revenue could directly benefit these communities as compensation for losses and this compensation could provide an incentive for sustainable conservation.

Due to the negative impact of parks experienced as losses by poverty-stricken communities, this population may be unwilling to wait for future tourism benefits. They are driven by daily survival. This in turn, may lead to illegal encroachment of protected areas, illegal resource harvesting and poaching for survival (Novelli & Scarth, 2007). It is important for conservationists to be conscious of this tension and act to mitigate it as these communities have rights to ownership and control of these natural resources (Nhancale, 2003 citing Peace Parks Foundation, 2003). Further, to achieve the community empowerment objective of protected areas demands an understanding of community needs and local politics, thus requiring community involvement in planning and management (Schmidt-Soltau & Brockington, 2004). Government, as a stakeholder has a commitment to ensure the application of long-term plans and technical
inputs involves communication between participating communities and the park authority (Berger, 1988).

2.2 Tourism in protected areas: tourism for community development

To ensure the dual objectives of conservation and community development are met, it is crucial to guarantee the availability of financial resources (Berger, 1988). One of the principle ways to achieve this is through tourism. Goodwin et al (1997) argued that some of the purposes of designating any national park were to provide a base for visitor recreation, education, public awareness, scientific study and reinforcement of spiritual and cultural values. This could be accomplished through tourism activities in protected areas. Protected areas are well-suited to tourism. They attract tourists because of the natural beauty of remote areas. Tourism in protected areas is an important mechanism for economic growth, community development and a key strategy to support biodiversity conservation (Drumm, 2003). Tourism provides a basis for community economic activities in the protected area or in the buffer zones of protected areas (Kreag, 2001); and creates opportunities for the economic benefits to be shared equitably among these communities (Goodwin, 2002).

Revenue and employment data relevant to tourism in protected areas are unavailable; while aggregated data about the whole tourism sector are available. Tourism within protected areas is a small part of the overall industry, a review of the industry could provide an indication of tourism potential in protected areas in terms of the potential impact on community development. Globally, tourism is a growing industry with the potential to provide income generation, employment, economic growth and poverty alleviation; from 1950 to 1998, international arrivals have increased from 25 million to 653 million. In 2001, tourism generated 11% of global Gross Domestic Product, employed 200 million people and generated US$463.6 billion through its various activities (Harris and Vogel, 2002). By 2004, international arrivals increased to 760 million and generated US$622 billion (UNEP & WTO, 2005). By the end of 2010, international arrivals will exceed one billion and generate more than US$1,500 billion (Godde, 1998). Finally, according to the World Tourism Organization (WTO), cited by the Ministry of Tourism (2004), by 2020 the number of tourist arrivals globally per year will reach 1.6 billion, and the revenue
will reach US$2 trillion per year. While tourism is one of the largest sectors in the world contributing substantially to economies, its potential is not fully recognized, particularly in Africa, for example, in sub-Saharan Africa it reaches around 55% of all services (WTO, 2004; Kreag, 2001). However, Shackley (1996) observed that the impact of tourism in protected areas has been positively perceived at the local community level with regard to employment, increased investment in infrastructure, better standards of living and higher incomes (Shackley, 1996).

To ensure that tourism in protected areas makes a positive and sustainable impact is complex and requires integrated planning and action. Tourism is dependent on the continued presence of the attractive elements of the biodiversity that the protected area is designed to conserve. In turn, tourism can generate the funds needed to maintain the protected area. The 1992 IVth World Parks Congress stated that tourism associated with protected areas should be established and implemented in accordance with the protected area principles to accomplish the objectives of maintaining ecosystem integrity, biodiversity and public awareness, as well as improving the quality of life of local communities. However, Shackley (1996) cautions that the success of tourism revenue in communities depends on the involvement of all key stakeholders in the planning and management of the protected area and on the value the stakeholders give to wildlife as an economic resource (Shackley, 1996). As shown in Figure 1, there is a reciprocal relationship among the three key elements of tourism; biodiversity conservation and community participation. This serves as a simple framework for evaluating the impact of tourism in protected areas on the communities associated with them. In practice, the application of this framework will be more complex.

As implied in Figure 1, to ensure community benefits from tourism, communities need to be involved in planning and management and consider and conserve wildlife as an economic resource (Shackley, 1996). The involvement of local communities in the development and practice of tourism are vital elements of successful community development. Both these elements are required for community empowerment and greater community commitment toward conservation of natural resources; and escalating economic growth and improved community benefits, (Ashley & Garland, 1994).
Long (2002) suggests Community Based Natural Resource Management (CBNRM) as an effective participative community program. It provides a source of income to local communities in turn, often leading to changes in community attitudes toward biodiversity conservation and sustainable natural resource use. CBNRM is an important approach to conservation and rural development because it uplifts rural communities and improves livelihoods through sustainable natural resource use. (NACSO, 2006). Nhatumbo et al (2003) noted that CBNRM has been undertaken in southern Africa as a community development strategy involving wildlife and tourism.

2.2.1 Tourism revenue distribution for community development

One way communities can benefit from tourism is through the distribution of tourism revenue for the purpose of community development. A review of tourism revenue distribution programs indicated that there is no uniform approach in these programs. All the programs recognize that a portion of revenue generated by some of the tourism activities should be distributed to communities. The tourism activities included in a revenue distribution program varies from country to country. In some countries few activities are included, in other countries extensive activities are included, but common to all are the entrance fees. The issue is complicated by the
necessity for tourism revenue to help finance the management of the protected area itself. One debate seems to be around pricing of fees and services to ensure tourism profitability and a balance between the generation of funds for communities and the maintenance of a competitive price for tourists. (Drumm 2003; Goodwin et al 1997)

Goodwin et al (1997) argue that to ensure tourism revenue benefits to communities and nature conservation, it is important to identify appropriate mechanisms for pricing entrance fees fairly. They further argue this complexity in stating that “the setting of park entrance fees is (only) one aspect of the total management of national parks. The setting of park entrance fees is a complex policy issue involving a number of ‘trade-offs’” and “these decisions need to be made within the framework of park management objectives”, noting that “pricing of entrance fees, services and facilities can reflect multiple management goals” (Goodwin et al 1997: 59). Finally they argue that the maintenance of ecological conservation is probably a government responsibility and tourism entrance fees, a supplementary income to support community development, recreation and spiritual and educational purposes.

Drumm (2003) extends the discussion noting that, globally, the pricing used in most protected areas is inadequate to cover park expenses and many protected areas do not charge entrance fees. To overcome this challenge, in most protected areas new approaches of charging and increasing entrance fees to improve community livelihoods and cover miscellaneous expenses have been adopted (Shackley, 1996); and mechanisms for distributing tourism revenues have been developed. There is sufficient evidence to demonstrate that tourism revenue distribution is possible and can be effective in achieving the dual purpose of conservation and community development. However, success is clearly dependent on community involvement and participation. Boyd et al (1999) specifically noted that community needs and participative decision-making to avoid misunderstandings around revenue distribution should be considered.

Makombe (1993) introduced another dimension to the debate. He argues that the establishment of national parks has been a challenge for communities. In many cases, for the purpose of conservation, communities were removed from the land to buffer zones; in other cases communities remained inside the parks. In both cases, communities suffered land and livestock
losses and damage to property from wildlife. Makombe (1993) argues that little attention has been paid to these losses. He submits that tourism revenue should be distributed to these communities as compensation and to garner their support for conservation. Two challenges around tourism revenue distribution exist, those are, revenue distribution and beneficiaries. First, community identified project participation and prioritized community needs are necessary to determine tourism revenue distribution. Second, established priorities determine beneficiaries as those participating communities most in need of tourism revenue. There is general agreement among conservationists that economic benefits should be targeted at communities most directly affected by, and suffering from the creation of the park as this is a form of compensation. (Archibald and Treves, 2001).

Finally, the success of tourism revenue distribution in communities depends on local community involvement in a strategic management plan derived from the value of wildlife as an economic resource (Shackley, 1996). A local strategic tourism plan is an important instrument in tourism distribution to maximize the benefits to the communities, as well as the equitable distribution of those benefits (Godde, 1998). Nevertheless, it can have a negative impact if not well planned and if communities are excluded from the process (Tatoglu et al, 2000). Shackley (1996) found that in the Tortuguero National Park in Costa Rica, communities living adjacent to the park did not receive revenue from tourism activities. In Kenya, when the Kenyan Wildlife Service was established, the tourism revenue from entrance fees was distributed among local communities; however, this revenue was seen to be too little to meet community ambitions. In this case, entrance fees were raised to satisfy community needs and to cover the promotion of conservation. Despite money being collected through entrance fees, this income goes directly to Country Councils for local development, and little money reaches communities living adjacent the park (Berger, 1988). These examples illustrate the necessity for consulting the communities and the complexity of doing so.

The Mahenye community in Zimbabwe is a useful example of a successful community development initiative using CBNRM and tourism revenue distribution. Through careful resource management, they used the revenue gained from tourism activities to improve the community as well as creating a joint venture partnership with the private sector to increase the
investment (ART, 2002). From 1990 to 2000, US$96,631 was generated from wildlife projects; and allocated to households, wildlife management, community council and projects. These funds were allocated democratically (ART, 2002) with benefits mostly going directly to households, but also to projects including electrification and piped water, classrooms, teachers’ houses, grinding mills, a cultural village for eco-tourism; development of a 15,000 ha wilderness area for hunting and eco-tourism; and a clinic. The Zimbabwe CAMPFIRE projects have also succeeded through empowerment of local communities, capacity building, stakeholder partnerships and tangible benefits for long-term sustainability (ART, 2002). Although operating under a different land tenure system (CAMPFIRE operates on community-held land, not a protected area), lessons can be learned from the experience. The CAMPFIRE approach shows that CBNRM provides an incentive for both wildlife conservation and community development for survival. Communities participate in the resource management and are given the opportunity to manage the development projects and accrue benefits from these projects. Thus, natural resources are used to improve social and economic conditions, while ensuring the conservation of the natural resources. It is not a passive process; the community is required to give their time and effort to the program (Regional Biodiversity Strategy, 2005). Another valuable form of community development is wildlife viewing as it may also lead to economic, social and environmental benefits to the communities as was the case in British Columbia, Canada where the communities living around the Brant wildlife festival earned approximately CAN$420,000 from wildlife viewing. (Smith, 2001).

It is evident that the success of community development through tourism activities in protected areas depends on three factors: the involvement of local communities; appropriate technical support; and projects delivering adequate benefits in accordance with community priorities. Key among these is community involvement because participation involves planning, implementing and monitoring by community, of community projects. Project design and implementation according to traditional practices and community needs conserves natural resources and provides continuing benefits for the community (Rattanasuworgchai, 1998; Adhikari, 2001). Thus it is important to consider tourism as one component for community development and poverty alleviation.
2.3 Tourism and poverty alleviation

Poverty is difficult to define and the definition depends on the “point of focus” (Sola, 2001: 2) and it encompasses income, social and economic dimensions. Poverty is a relative term often measured by the line above or below what is considered poor or not; it “specifies a societal minimum standard of living to which everybody in that society should be entitled” (Braithwaite & Mont, 2008:3). Poverty embraces concepts such as “lack of resources” and to access to “basic, but essential goods and services” (Sola, 2001: 2) and “economic wellbeing, capability, and social exclusion” (Wagle, 2002: 155). The real determinant of poverty is found in an integrated view of these factors rather than a focus on any one aspect (Wagle, 2002). The World Bank uses a universal standard of US$1/per day introduced for the purposes of international comparison, but other agencies have varied the actual value amount between US$2 and US$4 (Braithwaite & Mont, 2008). Using these standards it is estimated that 2.1 billion and 880 million people live on less than US$2 and US$1 per day respectively (The World Bank, 2007). This population lives with hunger and malnutrition, poor health, lack of access to water and sanitation, lack of education, lack of profitable skills, lack of confidence and susceptibility. One child out of five does not reach secondary school and, in developing countries, the life expectancy at birth is under 50 years, while in developed countries it is 77 years (WTO, 2004).

With particular reference to rural poverty, more than 80% of the global poor live in rural areas and rely on natural resources and primary agriculture, for their livelihoods. Among the priorities set for resolving poverty in Sub-Saharan Africa is natural resource conservation (The World Bank, 2007). Thus there is great incentive to reduce poverty in rural communities. Designing effective rural poverty alleviation programs is a real challenge in developing countries because there is no disaggregated rural poverty profile (The World Bank, 2004). Further, given that poverty is multi-dimensional “poverty reduction efforts have to be multi-targeted and are expected to show wide and diverse dimensions” (IFAD, 2001:3).

Sustainable poverty alleviation of the rural poor could be economically effective if adequate resources were re-allocated to rural areas. Sustainability of rural poverty programs also calls for better partnerships among stakeholders so the poor are able to take responsibility for their own
development (IFAD 2001). Poverty reduction projects should promote access for the poor to services and could incorporate a number of approaches, such as savings and credit schemes, income-earning opportunities, rural income and self-sufficiency, social insurance and security measures (Shepherd, 1998). IFAD (2001:3) submits that the “solutions have to straddle different disciplines and must encompass economic, social, political and institutional factors” to incorporate four critical elements:

- “institutions, markets, technology policy and asset arrangements (need) to reflect the critical role of food staples in the livelihoods of the rural poor”;
- “better allocation and distribution of water”;
- “achieving the poverty target requires redistributive empowerment of the rural poor through higher shares, access and control of appropriate assets, institutions, technologies and markets”; and
- “particular groups (especially women) and methods (especially participatory and decentralized ones) merit special attention”.

IFAD further encourages “participatory and decentralized management” because it will secure “democratic control and developing human potential” and will be cost-effective in the long run. IFAD (2001:4) stresses that “Special measures are needed to enable the poor to participate”.

2.3.1 The role of tourism in poverty alleviation

Bolwell and Weinz (2008), Yunis (2004) and DFID (1999) argue strongly in favor of tourism playing a significant role in poverty reduction. It is a large growth sector, and in many countries has a comparative advantage over other economic activities, having been found to have generated most of the new jobs in developing countries. In 2000, tourism was the main source of income in developing countries and one-third of developed countries (WTO, 2004).

It is well suited to remote rural areas common in lesser developed countries. Tourism can be structured to be labor-intensive and can accommodate women fairly easily. Low entry barriers
make it possible to establish new small-scale businesses owned by the poor. Currently, 112 million of people in approximately 170 countries are employed in tourism (Lascurain, no date). While it is not as powerful as education and infrastructural development, tourism can play a significant role in poverty reduction when it is included in a larger poverty reduction program (DFID 1999; The World Bank 2004; Bolwell & Weinz 2008, Lascurain, no date).

Tourism can contribute to poverty reduction when a number of elements are in place. Bolwell and Weinz (2008: 9) suggest that it starts with “governments recognizing travel and tourism as a top priority; business balancing economics with people, culture, and environment; and a shared pursuit of long-term growth and prosperity.” Tourism impacts on poverty reduction can be affected through three key strategies for payment (Bolwell & Weinz, 2008:11). These are:

- direct payments to the poor through “tourism jobs and small tourism enterprises”;
- indirect payments, including “earnings from supply chain industries as well as from tourism workers spending earnings in the local economy”; and
- spinoff payments from the fostering of entrepreneurs, increases in wages and prices and the development of infrastructures, and skills development.

In addition to the direct strategies of Bolwel and Weinz, Yunis (2004) identified eleven factors which when applied to planning tourism; ensure tourism can contribute to poverty alleviation. (Table 2). These two perspectives clearly indicate that for tourism to contribute to poverty alleviation it must be deliberately designed and implemented to do so.

Further, to harness tourism to reduce poverty, there are a number of issues to be considered. Bolwell and Weinz (2008: 10) again argue that it starts with government which needs to establish policy to make “tourism development pro-poor”. Jamieson et al (2004) note specifically the lack of government programs targeted on the informal tourism sector. Bolwell and Weinz (2008:9) further submit that the “vision” for the pro-policy in creating a sustainable tourism industry could:

- upgrade local skills;
- create appropriate local jobs;
- use local construction;
• embrace the local culture;
• improve local infrastructure;
• help sustain the local environment;
• source locally as much as possible;
• be inclusive over the long term;
• provide a unique experience for tourists; be
• promoted as a top economic priority; and
• create partnerships to improve livelihoods

Table 2: The World Bank outline of key factors in tourism and poverty reduction

<table>
<thead>
<tr>
<th>Element</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mainstreaming:</td>
<td>Ensuring that sustainable tourism development is included in general poverty elimination programs. Conversely, including poverty elimination measures within overall strategies for the sustainable development of tourism.</td>
</tr>
<tr>
<td>Partnership:</td>
<td>Developing partnerships between public and private sector bodies, with the common aim of poverty alleviation.</td>
</tr>
<tr>
<td>Integration:</td>
<td>Adopting an integrated approach with other sectors and avoiding over-dependence on tourism.</td>
</tr>
<tr>
<td>Equitable distribution:</td>
<td>Ensuring tourism development strategies focus on achieving a more equitable distribution of wealth and services, growth alone is not enough.</td>
</tr>
<tr>
<td>Acting locally:</td>
<td>Focusing action at a local destination level, within the context of supportive national policies.</td>
</tr>
<tr>
<td>Retention:</td>
<td>Reducing leakages from the local economy and building linkages within it, focusing on the long tourism supply chain.</td>
</tr>
<tr>
<td>Viability:</td>
<td>Maintaining sound financial discipline and assessing the viability of all actions taken.</td>
</tr>
<tr>
<td>Empowerment:</td>
<td>Creating conditions to empower and enable the poor to have access to information and to influence and take decisions.</td>
</tr>
<tr>
<td>Human rights:</td>
<td>Removing all forms of discrimination against people working, or seeking to work, in tourism and eliminating any exploitation, particularly against women and children.</td>
</tr>
<tr>
<td>Commitment:</td>
<td>Planning action and the application of resources for the long term.</td>
</tr>
<tr>
<td>Monitoring:</td>
<td>Developing simple indicators and systems to measure the impact of tourism on poverty.</td>
</tr>
</tbody>
</table>

(Source: Adapted from World Bank 2004: 11)

Jamieson et al (2004) raise a related concern about government in tourism-poverty reduction strategies. They cite government inefficiencies including cumbersome bureaucracy and lack of
organizational capacity as significant issues to overcome. They note that in some countries, there is only “limited recognition of the potential of tourism development by aid agencies” to contribute to poverty reduction. Bolwell and Weinz (2008: 1) caution that action rather than words is needed. They argue that “the link between tourism and poverty reduction has lacked focus in the development plans”. They concur with Bolwell and Weinz (2008) that clear policies and strategies are needed. They argue further that these (tourism) strategies must be “consulted”, articulated and monitored through national poverty reduction strategy plans. As noted earlier, one of the positive aspects of tourism is that it is labor intensive. However, a major caution to the whole development approach is that policies must ensure jobs created are “decent work” and not exploitive (Bolwell & Weinz, 2008).

A pivotal element determining sustainability is stakeholder involvement in the entire intervention process. Stakeholders include the poor, the private sector, and government at all levels, international aid agencies and development organizations, NGOs, and tourists (Jamieson et al 2004). They note, however, that many of these stakeholders, particularly “tourism and poverty officials” do not “have any education or training in using tourism as a poverty reduction tool. They note also that involvement of the poor is often limited in a practical way because they “lack access to credit which is essential in helping them to participate in the tourism economy” (Jamieson et al 2004: 7).

2.4. Impact potential of tourism

Tourism is a key force for socio-economic in the world, and it contribute significantly to community development (WTO, 2004). It has both economic and social impact potential.

2.4.1 Economic impact of tourism

Tourism is one of the largest sectors for economic development (Stynes, 1997). Stynes (1997) suggests that tourism activities can have a significant impact on economic development and can do so in a variety of ways, such as sales contributions from tourists; creation of employment and tax revenue; and income generation. The primary economic impact of tourism, however, is
through lodges, restaurants, transportation, and leisure and retail trade. This development can be in the region, country and local communities (Stynes, 1997).

However, to be effective, economic impacts on tourism elicits direct or indirect support from other sectors involved in tourism activity in the area. Community support is a vital element for tourism development as its activities affect entire communities. Local communities, therefore, need to understand the importance and value of tourism in their region. Tourism businesses depend on the involvement of other businesses, government departments and local communities (Mirbabayev & Shagazatova, 2002).

To analyze the economic impact of tourism, it is important to assess tourism activity contributions in the area to include the: amount tourists spend in the area;

- portion of sales by local businesses due to tourism;
- amount of income tourism generates for households and businesses in the area;
- numbers of jobs in the area supported by tourism; and
- The amount of tax revenue generated from tourism (Stynes, 1997).

Such an evaluation could provide an assessment of the economic impact of tourism by considering the interrelationship of other economic sectors with tourism (Stynes, 1997). Similarly, Mirbabayev and Shagazatova (2002:5), citing Fennell (1999) argued that to avoid negative economic impacts on the economic development of tourism activities, consideration could be given to the:

- rate of employment of local people in the tourism industry;
- extent of cooperation between tourism and other local businesses;
- degree of respect accorded to the local culture
- degree of respect accorded to the environment and its protection;
- extent to which the local population will benefit economically from tourism; and
- degree of concern of external tour operators for local tour operators.

Eagles, et al (2002) argue that the economic impact of tourism can be measured simply by the extent to which it generally increases wealth in the area. This broad evaluation of economic
impact, coupled with the more specific criteria of Stynes (1997) and Mirbabayev and Shagazatova (2002) provide a useful evaluative framework for the impact of tourism activities on local communities, to include:

- employment and income for the local population;
- impacts on local businesses and
- impact on the environment;
- respect for local culture; and
- revenue of total income and taxes as a contribution to the local domestic product

However, Font, et al (2004) cautioned that four key factors can negatively affect the potential economic impact of tourism in protected areas. These factors are the:

- seasonality and instability of tourism requirements;
- extent of fundraising activities to support management and conservation programs;
- ability of tour operators in protected areas to manage tourism; and a
- balance between successful tourism activities and the negative impacts that might be caused, thereby threatening continuing tourism activities.

Novelli and Scarth 2007, argue that there have been a number of studies searching for the economic impact of tourism and the benefit for both protected areas and communities, but the results show that limited attempts have been made to analyses community attitudes to conservation; and whether tourism can bring economic benefit to local communities. So there is a need for more studies in this area of community development.

2.4.2 Social impact of tourism

In many cases, social benefit is linked to economic benefit; therefore, discussions around social impacts may overlap the previous discussion on economic impacts. Social benefits to the community are also derived from tourism. An important aspect of social impact is that benefits, economic and social are required to reach the most disadvantaged and poor communities with limited access to park and reserve resource use and the resulting limited access to power (UNEP & WTO, 2005). In developing countries, traditional and indigenous communities are more
disadvantaged; there is a need to address the disadvantages to improve the position of this population in society. For example, women and youth need to be given income earning opportunities (UNEP & WTO, 2005).

A social benefit of tourism is the channeling of tourism revenue into social development programs such as education, training, public awareness and capacity building. In turn, these translate into additional economic benefits to informal economies, such as street businesses, personal guiding services and accommodation. As a part of the social development agenda, tourism income to the community could support the development of small, individual or community tourism projects developed by communities themselves. Joint ventures between the private sector and communities should be monitored to ensure community protection (UNEP & WTO, 2005).

Another social benefit of tourism is infrastructure improvements, both economic and social. Developing tourism in protected areas requires communications infrastructure to attract and provide services, such as “the construction of airports, bridges, power and telecommunication links and the upgrading of roads, waterways and port facilities”. Such infrastructure also benefits the local communities by providing “easy access to markets and jobs”, mobile phone facilities and the internet (Bolwell & Weinz, 2008: 25). Bolwell and Weinz further submit that the infrastructure created for tourism ultimately contributes not only to tourist development, but to the wider economy, as well as to biodiversity conservation. Tourism can also contribute toward the improvement of social infrastructure. Basic social infrastructure would include roads, schools, clinics and similar structures. Essential social infrastructure includes services such as water, energy and transport services. Socio-economic infrastructure includes shops, garages, leisure, entertainment and outdoor recreational facilities (Simpson, 2007, UNEP & WTO, 2005). Tourism contributes to these various forms of infrastructure through taxation, entrance fees, and investment by tourism enterprises and voluntary donations from tourists or tourism enterprises (UNEP & WTO, 2005). This entire infrastructure improves community livelihoods. Berger (1988), however, cautions that simply installing or upgrading infrastructure is insufficient, if there is a lack of systematic extension programs for infrastructure maintenance. Communities need to be involved in the maintenance otherwise these social services tend to be underutilized or to deteriorate.
Tourism has a unique social benefit of hosting communities; it can be a source of international friendship, reducing negative perceptions about and developing positive attitudes to each other in interactively learning cultures and customs. Tourists and local communities can create common understanding, foster tolerance and awareness and learn respect for each other, thereby creating positive links (Mirbabayev & Shagazatova 2002). Recreational and educational tourism activities could be enjoyed and appreciated by both tourists and communities without discrimination, providing yet another social benefit (UNEP & WTO, 2005).

Positive perceptions of conservation need to be fostered to overcome negative perceptions arising from losses experienced as a result of the creation and/or management of the protected area. Negative perceptions and attitudes become more positive when tourism has successfully delivered benefits to communities (Simpson, 2007). Similarly, Rattanasuwongchai (1998) found that tourism has been accepted in rural areas in Thailand because tourism revenue is higher compared to agricultural production revenue in these communities. This is compensation for any losses to protected areas and tourism.

2.5 Tourism and conservation

Tourism and conservation are also interdependent because tourism occurs in attractive environments, protected for the interest generated by the flora and fauna. As noted earlier tourism conservation areas can generate funds, but these funds also have to be maintained and sustainably managed. When this occurs it is possible to “achieve objectives of development and conservation” simultaneously (Ashley, 1995: 39). Further, protected areas cannot exist separately to the communities living in and around these areas. To ensure protected area objectives are met, these communities have to be involved in park management and benefit from tourism activities; they cannot be seen as “enemies” (Makombe, 1993: 22).

Tourism activities can lead to environmental destruction if revenues do not benefit the local population. As previously noted, if the local population benefit, negative perceptions towards wildlife conservation diminish. Makombe (1993) identifies public awareness, education programs and development initiatives as important elements to create positive perceptions of
conservation. Goodwin (1997) also observed that protected areas have an important role in the conservation of biodiversity through the provision of tourism income. In India, for example, the practice of slash and burn agriculture has been reduced, unused cargo boats have been replaced by house-boat operations and poaching has been reduced due to income generated through tourism in protected areas and distributed among local participating communities (WES, 2002).

Extending the reciprocal relationship between community and the protected areas, Ashley (1995) notes that the idea of community-based conservation is that local community should receive tangible benefits from tourism. The activities delivering benefits encourage a sense of responsibility regarding the use of natural resources. This can lead to community empowerment and the enhancement of conservation. Godde (1998) cautions, however, that even though community-based conservation has the potential to bring economic, ecological and socio-cultural benefits to communities; community-based conservation cannot be seen as an activity to solve all community problems. In examining the relationship between tourism and conservation, public awareness and conservation education emerge as central elements of biodiversity conservation in preventing wildlife poaching and environmental degradation (Archibald & Treves, 2001).

Community involvement and capacity building to provide local communities with new understanding and skills in managing and conserving flora and fauna is key to the conservation of protected areas (Regional Biodiversity Strategy, 2005). Government should ensure joint ventures so communities can understand the benefits and the value of tourism, through training and capacity building. In the development of tourism, communities will be considered as real stakeholders (WES, 2002). Practical training usually averts expectations among local communities, so benefits from tourism should turn from aspiration into reality. These benefits can turn into significant reality if they are significant enough among stakeholders (WES, 2002). Sound as they are, the concepts of community involvement and participation are seldom practiced as the community is still often ignored in decision making process (Rattanasuworgchai, 1998). In southern Africa, for example, conservation of natural resources is given little consideration as a source for development, due to the limited extent and dissemination of information and knowledge about their value. As a result, natural resources are exploited without
consideration of future needs or of the impacts of use on the environment, rather than sustainably used (Regional Biodiversity Strategy, 2005).

There is, however, evidence that the involvement of key stakeholders as well as external support agencies in tourism planning strategies can strengthen public awareness programs. The success of tourism and conservation will largely depend on the involvement and participation of local communities both in strategic planning and management. The involvement should require a perspective valuing biodiversity conservation as an economic resource (Shackley 1996). An example of a successful and inclusive awareness program is Huascaran National Park, Peru. Local tourism planning involved national officials, park staff, private sectors and more than hundred community members. Due to the extent of stakeholder involvement in the planning process, this program has been regarded as the most inclusive and effective effort to manage tourism in protected areas (Godde, 1998).

2.6 The interdependence of tourism, conservation and community development

The recurrent theme is one of reciprocity within a larger system involving the sub-systems of tourism, biodiversity conservation and community development. Similarly, tourism and biodiversity conservation are interdependent, so there is community interdependence with tourism and biodiversity conservation. Drawing on the simple framework presented in Figure 1, Figure 2 shows greater detail and complexity in relationships and contributions among communities, natural resource conservation and tourism activities.

As shown in Figure 2, all three elements are connected to each other. The local communities utilize the natural resources and simultaneously benefit from them and protect them. Tourism activities generate income for communities and for conservation. Conserved biodiversity provides a resource-base for communities and tourism activities (Mirbabayev & Shagazatova, 2002; Ministry of Tourism, 2004). Highlighted is that all three elements are important to the overall sustainability of the individual elements. It is a reciprocal relationship, the balance of which must be maintained. This figure forms a useful framework for examining the impact of
tourism in protected areas. The framework takes into account the potentially positive and negative impacts of tourism on communities and on conservation in protected areas.

**Figure 2: The relationship between communities, conservation and tourism**  
**Source:** adapted from Mirbabayev and Shagazatova, (2002)

In conclusion, an important context for measuring tourism revenue impact is the impact on poverty alleviation. While measuring and examining individual social, economic and conservation impacts, holistical meaning is found; the real impacts will be revealed when examined in terms of contributions to poverty alleviation.
CHAPTER 3 DESCRIPTION OF THE STUDY AREA

This chapter presents a background on Mozambique. It provides the context for the study by presenting essential information about BANP with particular reference to Bazaruto Island where the study was conducted.

3.1 General Background

Globally, Mozambique is one of the poorest countries, with 54% of the population living in poverty. The government of Mozambique has developed a Strategy on Sustainable Development and Program and Action Plan for Poverty Reduction (PARPA II), with the objectives of poverty reduction by 2015 (INE, 2007).

Mozambique is a large southern African country situated between the mouth of the river Rovuma and the Republic of South Africa. It is between the parallels 10º 27’ and 26º 52’, latitude South and the Meridians 30º 12’ and 40º 51’ to the East. Mozambique is bordered by Tanzania in the north, Malawi, Zambia and Zimbabwe in the west, South Africa and Swaziland to the south and it is bathed by the Indian Ocean through the East (fig 3). Mozambique covers an area of 784,754 km², with an estimated population of about 20,530,714. About 13% of the population lives in urban areas. It has 25 sizable rivers flowing into the Indian Ocean; the largest river in Mozambique, providing access to central Africa, is the Zambezi. Mozambique has 10 provinces, each with a main city; 128 districts, 393 geographically-based administrative units covering 1042 ‘localidades e povoacoes’, that is, towns and rural areas. Maputo is the capital of the country with a population of about 1, 2 million. The Mozambique climate is predominantly tropical-humid to sub-humid (Republic of Mozambique, 2002; Houguane, no date).

Mozambique was ‘discovered’ by Vasco da Gama in 1498 and in 1505 was colonized by Portugal, remaining under colonial rule for the next 470 years. In 1962, three movements joined forces and formed the Front of Liberation of Mozambique (Frente de Libertação de Moçambique or FRELIMO) to fight against Portuguese rule. In June 1975, Mozambique became independent from Portugal. After independence, the country engaged in a devastating 16 year-long civil war.
fought between RENAMO and FRELIMO. The war killed millions of people, especially in rural areas; and destroyed much of the infrastructure. To run from the war, many rural people migrated to the cities, many other people fled to nearby countries, such as Malawi, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe. In October 1992, the two rival parties signed a peace accord, and in 1994 free elections were held. Mozambique is now facing the challenge of rebuilding a society and economy (Newitt, 1997).

Portuguese is the national language because the country was colonized by the Portuguese; there was no widespread education for African people so no other European language became predominant. Several other local languages are spoken, four of which are considered the major indigenous languages: Makua, Nyanja-Sena, and Shona and the four minor are Makonde, Yao, Copi, and Gitonga. Kiswahili, Shangaan, Zulu, and Swazi are also spoken. The neighboring African countries also commonly speak these languages, for example, South Africa, Swaziland, Malawi, Tanzania (UNCRC, 2009).
Mozambique is rich in marine and land natural resources. About 620 000 km² are covered by forest and around 87 000 km² are covered by protected areas for wildlife, forest and marine resources. That is, about 11% of the country is covered by national parks, forests, game reserves and controlled hunting areas known as game hunting areas. It is home to more than 5 500 plant species, 220 mammals, and more than 690 birds, most of which are endemic species. The country has 36 million ha of cultivable land of which only 12% is being used; and about 5 million ha (7%) of the country is currently under cultivation. More than 75% of the population is engaged in subsistence agriculture, and the country mostly relies on its natural-resource base, such as land, water resources, forest products, fisheries and mines (MCEA, 2009). Generally, the
Agriculture is extensive having about 3 million ha of the land capable for irrigation, but only 37,500 ha are used for irrigation (Nhatumbo, 2003). About 2700 km² is covered by coastline representing the third longest coastline in Africa (Soto, 2007). Despite a high rate of economic growth since the civil war, Mozambique remains one of the poorest countries in the world and the population is predominantly rural, dependent on natural resource management and use for their livelihoods (Ribeiro, 2001).

In 1960s and early 1970s, during the colonial era, protected areas in Mozambique were established. After independence in 1975, more national parks and game reserves were established, such as the Quirimbas National Park, the Chimanimane National Reserve and the Limpopo National Park to contribute to global environmental conservation and to achieve economic and social development. The objective in protecting areas in Mozambique is to conserve the ecosystems, habitat, biodiversity and natural resources for the benefit of present and future generations. Furthermore, protected areas should contribute to socio-economic development and to livelihoods of communities living inside protected areas and in buffer zones. There are about 120,000 people living in these areas (Republic of Mozambique, 2006). The goal in socio-economic development is to turn protected areas into a zone providing environmental conservation and benefits to communities living in the protected area and the buffer zones. This goal is fundamental and diverse because it results in protection of the environment and of the people, through sustainable environmental management and employment and wealth generation resulting in poverty reduction (Ministerio do Turismo 2009).

During the colonial era, the government established game parks and reserves, but did not involve the communities adjacent to those parks (Ribeiro, 2001). After independence, the government recognized the country’s natural resources, if well managed in protected areas could contribute to community development through tourism activities. There was an understanding of the need for community involvement in natural resource management to generate benefits to communities (Ribeiro, 2001). A number of Community-Based Natural Resource Management (CBNRM) projects were started such as the Tchuma Tchatu Project in Tete Province, the Chipanje Chetu Project at the Niassa Reserve and the projects in the Gorongosa and the Bazaruto National Parks (Ministry of Tourism, 2004). Most of these CBNRM projects have limited capacity to find
community solutions for community improvement and sustainable livelihoods (Pereira, et al. 2003).

For example, the Tchuma Tchatu Project, meaning the ‘our wealth’ project was one of the first CBNRM projects established in Mozambique. It was established in 1994 in an area of about 200,000 ha along the Zambezi River in Tete Province, close to the Zimbabwe and Zambia borders. The area is typical mopane forest ecosystem. While it has been a concession area for safari operations since 1993, there has been conflict around responsibilities within the collaborative natural-resource management system. The conflict was among local communities, private operators and the local government and resulted in the community not benefiting from the project. The central government intervened and endorsed CBNRM by establishing collaborative natural-resource management to motivate participative conservation management and sustainable natural-resource use. They also established mechanisms for sharing the income among all parties involved in the safari operation. In May 1995, an Inter-Ministerial Diploma was signed to allow tax revenue to be directly collected and proportionally shared: 33% for local communities, 32% for local government and 35% for the national tax system. The project has proven to be successful (Filimao, et al. no date).

Mozambique has national network of protected areas covering about 15.3% of the total surface of the country of which 2.3% correspond to the marine area; these areas comprise six national parks, two marine parks, six national reserves and twelve hunting blocks.

Prior to 2001, the Ministry of Agriculture, through the National Directorate of Forestry and Wildlife (DNFFB) was responsible for conservation areas. In 2001, this responsibility was transferred to the Ministry of Tourism through the newly created Directorate for Conservation Areas (DNAC). The DNAC is responsible for all protected areas, including National Parks, Game Reserves and coutadas, hunting areas (WWF, 2006).
3.3 Tourism in Mozambique

Tourism has played an important role in Mozambique’s economy for many years. In 1973, before the civil war, Mozambique received around 400,000 tourists, mostly from South Africa, Zimbabwe and Portugal. Due to the civil war in Mozambique, tourism declined; tourism infrastructure was destroyed and the wildlife resources, especially the ‘Big Five’, also declined. The signing of the Peace-Accord in 1992 marked the start of the revitalization of tourism. In the mid-1990s, the economy experienced growth and a number of business hotels have been developed. For example, more up-market small-scale development has emerged on the islands of the BANP and on the mainland in the Vilanculos District, as well as in the northern regions, mostly Pemba and the Quirimbas National Park in Cabo Delgado Province, and in Nacala District in Nampula Province. Mozambique currently offers a total of 12,000 beds of which about 5,000 are “luxury standard”.

Currently, Mozambique is considered one of the leading tourist destinations in Africa. Tourism activities have been developed around three areas: the beaches, wildlife and the urban vibe of Maputo and Beira. The pristine beaches, warm sea, boating and fishing opportunities were considered to be the most attractive and unique activities in southern Africa; the wildlife product was also well developed. For example, Gorongosa National Park is considered one of the best game parks in southern Africa, and Mozambique’s hunting areas (called ‘coutadas’) have been considered to be among the best hunting areas in Africa (Ministry of Tourism, 2004).

Tourism contributed 1.2% to the national Gross Domestic Product (GDP) in 2002 (Ministry of Tourism, 2004). According to Ministry of Tourism (2003:4) “Recently Mozambique has made considerable economic progress. Fiscal discipline and prudent economic policy has stabilized inflation and grown GDP at a faster rate than in most developing countries, albeit of a low base. The challenge of poverty alleviation however remains considerable. Direct investment, wealth creation and employment are required to enhance living standards. Tourism has an important role to play in this regard and could become a cornerstone of Mozambican economy. Growing tourism will complement and assist the development of infrastructure and growth of a diversity
of related economic sectors including agriculture, information technology, media, arts and crafts”.

### 3.4 Background of the study area: BANP

In 1971, the Benguerua, Magaruque, and Bangue islands and the extending five kilometers to the west and 100 meters line of bathymetry to the east were declared as the Bazaruto National Park. In November 2001, the park boundary was extended to incorporate the two remaining islands, Bazaruto and Santa Carolina; its area increased from 600 km² to about 1,430 km² including land and sea. Thus the BANP currently consists of the five islands: Bazaruto, Santa Carolina, Benguerua, Magaruque and Bangue. The islands are situated between the latitude of 21°30' - 22°10'S and 35°22' - 35°30'E and have a combined land area of 156 km². They are oriented approximately North-South, 30-35 km offshore from the Mozambican coastline (Motta, 2009). They are probably sections of a former sandy peninsula connected to the mainland (Figure 4). The Archipelago has tropical climate sub-humid to moderate-humid, with an average temperature of 30°C in summer and 18°C in winter and an annual mean temperature of 24°C. The temperature of the ocean water is between 23°C in summer and 28°C in winter (Everett, et al 2008).

Administratively, the BANP falls within the province of Inhambane and is split between Vilanculos and Inhassoro Districts. The nearest towns on the mainland are Inhassoro in the north and Vilanculos to the south (Figure 4). The objective in creating the Park was to protect endangered species such as dugong and marine turtles (Cunliffe, et al 2005).
3.4.1 Natural Resources and Biodiversity Conservation in BANP

BANP supports a high diversity of marine and terrestrial ecosystems including coral reefs, seagrass beds, mangrove, salt marshes, sand and rock beaches, sand dunes, coastal thicket, swamp forest, savanna woodland, grassland and fresh water. It supports a rich variety of fauna and flora (Table 3).
Table 3 Flora and Fauna of BANP

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flora</td>
<td>The common mangrove species found in BANP has been used by local communities for construction, medicine and other practical uses. For example: Avicennia marina is used as timber for construction, firewood and folder; Rhizophora mucronata, Brugiera gymnorrhiza and Sonneratia Alba are used as firewood and medicine; Ceriops tagal are used as poles, firewood and timber for boat construction. Some forest species are used for consumption and honey production (Menese, 2007).</td>
</tr>
<tr>
<td>Avifauna</td>
<td>More than 186 species of terrestrial and aquatic birds have been recorded in the park. The park is an important stopover for migrating avifauna, particularly palaeartic shorebirds</td>
</tr>
<tr>
<td>Reptiles and Amphibians</td>
<td>A total of 45 species of reptiles and amphibians have been recorded in the park. Nile crocodiles were recorded in fresh water lakes in Bazaruto and Benguerua islands; two endemic species and four subspecies of lizards; and five species of marine turtles are found in the park.</td>
</tr>
<tr>
<td>Mammals</td>
<td>A relict population of small mammals, such as red duiker, bushbuck, night apes, samango monkeys, red squirrels and four-toed elephant shrews is still present in the park. Importantly, the park is also home to the aquatic mammal, the dugong.</td>
</tr>
</tbody>
</table>

In 2000, due its remarkable biodiversity, conservation importance, pristine condition and scenic beauty, the BANP was listed as a potential site for nomination as a UNESCO World Natural Heritage site. In 2002, it was recognized as a Gift to the Earth from the Mozambican government (WWF, 2006).

3.4.2 Socio-economic conditions

The main source of income generation for over 70% of families is small-scale, fishing activities; This includes the gathering of sand oysters and other marine resources. In addition to their fishery activities, these communities also rear livestock, mainly goats. In terms of terrestrial resources, they use palm leaves for mats and baskets made by both males and females. The mats and baskets are sold to hotels and tourists. They also extract traditional wine from palm trees. Females do small-scale agricultural activities but are limited by poor soil and by legal constraints introduced by the national park management governing land use. Policies do not allow the practice of large-scale agriculture inside the park (Motta, 2009). Other types of income generation not directly dependent on natural resources are: boat lending for transport, fishing and
tourist trips; small-scale shop keeping; and informal trading of basic necessities. A limited number of communities are employed by the park and the five functioning hotels.

Figure 5: Community of Sitone doing their fishing activities for income generation and livelihoods
Photo by: Ricardina Matusse

3.4.3 Tourism operators in BANP

Since the 1950s, the BANP has been a tourism destination and attraction. There are currently five functional hotels distributed on two islands. The Bazaruto and Indigo Bay hotels are located on Bazaruto Island. The Benguerua, Marlin and Gabriel lodges are located on Benguerua Island. These lodges have high-value, low-impact tourism activities within the park. Also, there are two hotels under rehabilitation, one on Santa Carolina Island and another on Magaruque (WWF, 2006). The Islands are accessible by boat and small aircraft. The five functioning hotels make a significant contribution to the local economy and livelihoods of local communities, through provision of employment opportunities and a provision of a portion of tourism revenue fees shared among local communities. About 568 people, 17% are islanders, are employed in the functioning hotels. If tourism operations are sustainable, dependence on natural-resource use for basic community needs is reduced. In turn, this could have a positive impact on the maintenance of the natural resources being over-harvested by the local communities (Cunliffe, et al 2005). Thus tourism operators are important stakeholders within the park, they could collaborate to increase the number of tourism attraction which could, in turn, improve the communities’ lifestyle.
3.4.4 Historical and Cultural Issues

The Bazaruto Archipelago was an important trade port between Europe, Asia and Africa. The Portuguese and Arabian presence on the archipelago influenced the local culture as reflected in some architecture and settlements on the islands. The trade port has since been re-located to Maputo.

Bazaruto, Benguerua, Magaruque and Bangue are inhabited; while Santa Carolina is uninhabited. As previously noted, the total population of all islands is approximately 3500 people. The communities are settled in seven zones on the four inhabited islands of Sitone, the location of the park headquarters; Zenguulemo, and Pangaia on Bazaruto Island; Chizunguene, Beve and Chiringoma on Benguerua Island; and a small population on Magaruque and Bangue Islands, regarded as a single zone (Motta, 2009).

Most of the communities living in BANP belong to the Tsonga tribe and speak a distinct dialect called Chioca. They also speak the mainland language known as Xitsua, whilst a few speak Portuguese and English (Motta, 2009). Of the 3500 residents in the BANP, including the the Bazaruto island the study area, about 450 originated from outside the area and are employed in hotels based on the islands in the Archipelago. While they live and work in the BANP, they are not considered permanent residents in the archipelago.

3.4.5 Institutional and Legal Issues

The important policy thrusts implemented after 1992 included the promotion of the role and rights of local communities in the management and benefit of land, forest and wildlife resources (Ministry of Tourism, 2004). The BANP was the first park to integrate governance, natural resource reform and stakeholder involvement in natural resource management. Consciously and intentionally different stakeholders such as NGOs, local communities and the private tourism sector were involved. Local communities were involved to support rural development processes, and to directly share benefits derived from sustainable natural-resource management for sustainable socio-economic development (WWF, 2006).
3.4.6 Selection of the Study Area

The study was conducted on Bazaruto Island at BANP in the Vilanculos and Inhassoro Districts of the Inhambane Province, Mozambique. BANP is one of only two marine national parks in Mozambique, the other being Quirimbas National Park in Zambezia Province. In Mozambique out of five National Parks and six Game reserves, BANP is one of only three national parks and two game reserves with tourism activities subject to entrance fees. Before the application of new legislation requiring 20% tourism revenue distribution to adjacent communities, BANP was the first national park to implement the distribution of tourism revenue to communities living around the park. Thus BANP has the longest history of community remuneration and would, therefore, provide the richest source of data for study. Another reason to select the BANP was that to meet its conservation goals, it would be necessary to improve the management of natural resources by local communities. This could enable local communities to achieve improved livelihoods, so this study could contribute to that process.

3.5 Bazaruto Island

The research was only conducted on Bazaruto Island, the most populated island within the five islands in BANP, with about 2,581 inhabitants. The population is distributed across three communities, Sitone in the north, Zenguelemo in the central region and Pangaia in the south (Table 4).

<table>
<thead>
<tr>
<th>Zone</th>
<th>Nº of families</th>
<th>Females</th>
<th>Males</th>
<th>Total Habitants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sitone (North)</td>
<td>206</td>
<td>415</td>
<td>375</td>
<td>790</td>
</tr>
<tr>
<td>Zenguelemo (Central)</td>
<td>391</td>
<td>519</td>
<td>464</td>
<td>981</td>
</tr>
<tr>
<td>Pangaia (South)</td>
<td>289</td>
<td>426</td>
<td>384</td>
<td>810</td>
</tr>
<tr>
<td>TOTAL</td>
<td>886</td>
<td>1,360</td>
<td>1,223</td>
<td>2,581</td>
</tr>
</tbody>
</table>

Source: Personal communication BANP Park Warden
Bazaruto Island, the biggest island in the BANP is situated in front of Inhassoro village, Inhassoro District. It is 32 km long and 7 km wide, comprising an area of 12,000 ha. It is in the Eastern African Marine Eco-region, with a coastline of over 4 600km from South Africa to Somalia (Savor Hotel, no date). Globally, Bazaruto Island is probably one of the most unique desert islands in existence; it is surrounded by magnificent stretches of beaches and fascinating fresh water lakes containing crocodiles (Figure 6) (Cunliffe, et al. 2005).

Figure 6: Bazaruto Island sand dune and lakes  
Photo by: Ricardina Matusse

It was found, on visiting the island as a part of the study, that Bazaruto infrastructure consists mostly of simple, traditional structures. Homes are constructed of mud and pole, with thatched roofs. There are no paved roads; all roads are informally constructed and subject to erosion from rain and other factors.

There are no formal shops, trading is at the traditional shops, known as barracas. Supplies to the barracas are limited and erratic due to irregular transport to and from the mainland. Prices are usually high due to difficulty of supply and high demand. Most household goods, such as staple food not easily grown in poor soils and are restricted by park policies.

Communication is mostly by cell phones, commonly owned by inhabitants. There is no articulated electricity so hotels have generators and access to gas piped in from the mainland. The general population does not have access to these services. Additional information about Bazaruto will be discussed in Chapter 5 as a part of the findings of the study.
CHAPTER 4  METHODOLOGY

This chapter examines and explains the methods and techniques used in this study. The study is qualitative and a survey method was used in the context of an interpretive paradigm. To conduct this study, the researcher was involved in the process. Further, the researcher is employed by the government of Mozambique, working under the Ministry of Tourism and directly involved in the management of protected areas that is national parks and game reserves.

The study was conducted using the following methods: direct observation and document review. Also various techniques were used such as: interviews, a questionnaire and a focus group discussion. The main objective in using these methods was to explore the social, economic and conservation impacts of tourism revenue distribution on communities living in BANP, in Mozambique.

The aim in applying these methods is to understand, examine, analyze and interpret tourism revenue distribution to communities. This is done through assessing economic, social and conservation impacts to produce information. This information could enable informed decisions about the use of tourism revenue in BANP in Mozambique to improve community gains.

4.1 Research Method

The study is qualitative in that it produces findings not determined in advance and may be beyond the boundaries of the study. Qualitative data are interpreted to seek an understanding of a complex issue in a situation. That is, they enable the researcher to explain through research data, the problems found in the local communities in the study (Mack, et al, 2005). Generally, qualitative research for gathering information and uses: participant and non-participant observation, field notes, structured and unstructured interviews and document analyses. In this research, three key methods were used, survey, direct observation and document review (Table 5).
The survey was conducted in the context of an interpretive paradigm to analyze the social, economic and conservation impact of tourism revenue distribution on communities. It involved four techniques: semi-structured interviews, a questionnaire, focus group discussions and direct observation.

According to Mouton (2001), surveys are used in a large population; a wide sample of representatives is measured. Surveys enable the collection of information involving a large number of public opinions to examine the impact of tourism revenue distribution on BANP communities. The advantage of using a survey is that it becomes possible to learn from a large group of people; if the sampling size is implemented accurately, it gives accurate results (Mouton, 2001). The methods enable the researcher to analyses many specific community issues in detail; extrapolation, that is, generalizations from the results to other similar cases may be made (Kumar, 2005).

<table>
<thead>
<tr>
<th>Table 5: Research methods, tools and techniques and sample size used</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Paradigm</strong></td>
</tr>
<tr>
<td>-------------------</td>
</tr>
<tr>
<td>Interpretive</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

4.1.1 Interviews

Interviews are useful techniques for gathering information not yet available to the researcher (Kumar, 2005); and usually conducted face to face between interviewer and respondent (Mack et al, 2005).

Prior to the interviews, a meeting was held at the BANP main camp with two members of the BANP management team, the park warden and the community officer, who served as key informants in the research. The objective was to get a first impression regarding the:

- general impact of tourism revenue distribution on communities;
• economic, social and conservation impacts; and

• application of the 20% of tourism revenue in communities.

During the interviews additional important stakeholders in the process were also identified.

4.1.2 Semi-structured interviews

Semi-structured interviews tend to be informal and are used to fully explore a general area of interest using an interview guide (Appendix B and C) with a list of topics to be discussed (Mitchell et al, 2005). In this study, a total of 15 semi-structured interviews were held purposively with respondents familiar with the area and knowledgeable about the history of BANP. The respondents were park managers, that is, park wardens, community officers and administrators, tourism operators from the two hotels, TYA committee members, teachers, local government and district and national government employees (Figure 7). The TYA is an elected community-based structure, similar to a steering committee and is responsible for receiving and disbursing funds. They appear to make expenditure decisions, but their right to do so is contested as it is meant to be a collective decision-making process only facilitated and administered by TYA. The TYA was not meant to be the decision-making body although they are key stakeholders in the BANP-community development process. Before the interviews, appointments were made firstly to familiarize the respondent with the discussion topics and secondly, to collect the data for the study.

![Figure 7: Interviews with the Secretary of TYA](Photo by: Ricardina G. Matusse)
4.1.3 Questionnaires

The questionnaires had a short introduction about the importance, purpose and objectives of the study to ensure respondent understanding of the task (Appendix A). A face to face questionnaire was conducted for the advantage of personal contact (Figure 8). Although time-consuming and labour-intensive it often elicits a higher response rate, (Kitchin et al, 2000). A total of 77 households were sampled purposively from the three local communities distributed across Bazaruto Island, namely Sitone (27), Zenguelemo (30), Pangaia (20). This sampling enabled a great deal of data on tourism revenue distribution and the social, economic and conservation impact of this distribution on communities in BANP, to be collected. Questionnaires were in English and Portuguese and administered in Shangana and Portuguese because most community members could not speak Portuguese and English.

![Figure 8: Using questionnaire to gather information from the community members on tourism revenue](Image)

Photo by: Ricardina Matusse

4.1.4 Focus group discussion

This type of group discussion involves about 8-10 respondents with relevant knowledge and experience of the topic (The World Bank 2004). The focus group discussion is informal to collect in-depth information, so it is a qualitative method of data collection (Elmendorf & Luloff, 2001). A focus group discussion with relevant community members was held the following participants (Figure 9): five community leaders participated; two from Pangaia, two from Zenguelemo and one from Sitone selected using purposive and snowball sampling (see Section
4.2. The meeting was held at Zenguemelo community zone where the representative of the district government known as Chefe do Posto is located. The community leaders were invited by the Community Officer to participate in the focus group discussion. No attempt was made to determine or identify a person to participate as the community leader. The researcher facilitated the meeting to encourage all participants to freely contribute information around the research problem; the discussion was relevant to a broad audience. Thus, various experiences around tourism revenue-distribution impacts on communities were shared. Other topics discussed were: revenue utilization for the benefit of all community members; and natural resource conservation.

An additional two groups composed by 40 community members were convened to discuss tourism revenue-distribution impacts on communities; the groups comprised of 25 female oyster collectors and 15 mixed from the fisheries groups.

Figure 9: Focus group discussion composed by community leaders of the 3 communities
Photo: by Ricardina Matusse

4.1.5 Additional data collection methods used

Direct observation and document review were also used to collect data for the study. Direct observation is important because it gives the researcher the information to be studied first-hand compared to interviews and questionnaires, where the information is second-hand (Welman et al., 2005). Direct observations enable the researcher to explore more features to understand the event or manifested behaviors (Babbie & Mouton, 2006). The direct observation was conducted during the interviews; different events were recorded using a digital camera.
Review of documents- relevant information such as progress reports associated with the research topic, annual plans, reports on past projects and reports concerning relevant participating stakeholders were used to augment information collection from sources other than interviews, direct observations and focus groups.

4.2 Sampling Method

A sample of 77 people was drawn from a total of population of 2508 in the three villages included in the study. Table 6 illustrates the sample size of the people in the three villages.

<table>
<thead>
<tr>
<th>Villages</th>
<th>Total inhabitants</th>
<th>People sampled</th>
<th>Percentage of Village Populations (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sitone</td>
<td>790</td>
<td>27</td>
<td>3.4</td>
</tr>
<tr>
<td>Zenguelemo</td>
<td>981</td>
<td>30</td>
<td>3.05</td>
</tr>
<tr>
<td>Pangaia</td>
<td>810</td>
<td>20</td>
<td>2.4</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>2581</strong></td>
<td><strong>77</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Sampling was done using the purposive sampling method (Leedy & Ormrod, 2005) in combination with snowball sampling (Yoddumnern-Attig et al, 1991). The community officer chose the first respondent in each village. The first respondent was known to be an active and informed member of the community and thus a key informant. The subsequent respondents were identified in a number of ways. Some were recommended by the first respondent; and others were identified by the community officer with the specific instruction to identify community members not usually participating in BANP-related meetings. Older females and younger community members were also deliberately selected. In effect there were four respondent groups, those who are: active and vocal in BANP and community-related meetings and are generally well-informed and are heard in discussions; not heard in discussions and do not generally participate in meetings; older females often not heard whether or not they participate in
meetings; and young people also often not heard, whether or not they participate in meetings. These four groups were purposively selected to ensure the collection of the widest and most diverse range of perceptions possible within the resource constraints. This is consistent with purposive sampling (Leedy & Ormrod, 2005). In applying the snowball method, respondents were identified and interviewed in each group until the responses became repetitive with a similar pattern of responses and nothing new could be added. The aim was to obtain a maximum diversity of perceptions; when diversity ended, the sampling ended (Yoddumnern-Attig et al., 1991).

4.3 Data Analysis

Semi-structured interviews and focus group discussions are exploratory in nature and involve open-ended questions that generate primarily qualitative rather and quantitative data. Analysis of such qualitative data is a process of separating the data into units to analyze and reconstruct in a manageable and comprehensible manner. It can be supported by quantitative data gathered primarily through the questionnaires and can be represented in numerical form (Thorn, 2000).

In this study the qualitative data were analyzed using the spiral method, a qualitative data description process (Leedy & Ormrod, 2005). The aim of the analysis was to understand the impact of the tourism revenue distribution on recipient communities by assessing its economic social and conservation impact on Bazaruto Island. Excel was used to organize and analyze the quantitative data. Descriptive analytical statistics such as frequencies and percentages were generated for the quantitative data and were presented in tables, charts, graphs, figures and diagrams, to support qualitative data. To facilitate and understand the analysis of the raw data, tables were constructed to group the population sample according to age, education, marital status, occupation and gender. Data was analyzed per village and in aggregate across all three villages. These data provided details per village and an overall picture of the area.

The results from the focus group discussion involving key stakeholders and from the semi-structured interviews involving local government, park management and tourism operators were
used to augment the information from community members. The information was compared for consistency and to add depth and diversity to the main research findings.
CHAPTER 5  RESULTS

This chapter presents the findings of the study. It starts with a demographic profile of the respondents and then presents impressions from interviews held with key informants. The balance of the chapter presents the findings regarding the economic and social impact of tourism revenue and the relationship between tourism and conservation.

5.1 Demographic Profile of Respondents

Out of a total of 2581 inhabitants in the three Bazaruto Island communities, 77 (3%) of inhabitants were interviewed to provide information for tourism revenue distribution. The sampling process and limitations were discussed in Chapter 4.

The most common (25%) age group of the respondents was 30-35, while the majority of the respondents, just over half (55%) were male. Some 61 (79%) of the respondents were born in BANP, while the remainder (21%) were born outside the BANP (Table 7). Some of the respondents came to the area because of marriage; others because of resource availability, such as fish and oysters, availability; and others came from outside BANP for job opportunities.

Sixty-one (61) (58%) of the respondents use marine resources. Thirty-one (31) (29%) collect oysters, (“Mapalo” in the local language) and 30 (28%) are fisherman. Most of the oyster collectors are female and most of the fishermen are male. The oysters and fish are for family consumption as well for sale in the villages, to the hotels and to the main island to generate income.

Eleven (11) (10%) indicated that they are employed; some in the two existing hotels, Pestana Bazaruto and Indigo Bay Lodges; and others in government institutions such as BANP, the clinic, a nurse, the district administration and the FRELIMO Party.
Table 7: Demographic profile of the respondents

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>42</td>
<td>54.5</td>
</tr>
<tr>
<td>Female</td>
<td>35</td>
<td>45.5</td>
</tr>
<tr>
<td>Age</td>
<td>Frequency</td>
<td>%</td>
</tr>
<tr>
<td>20-25</td>
<td>13</td>
<td>16.9</td>
</tr>
<tr>
<td>25-30</td>
<td>12</td>
<td>15.6</td>
</tr>
<tr>
<td>30-35</td>
<td>19</td>
<td>24.7</td>
</tr>
<tr>
<td>35-40</td>
<td>9</td>
<td>11.7</td>
</tr>
<tr>
<td>40-45</td>
<td>4</td>
<td>5.2</td>
</tr>
<tr>
<td>45-50</td>
<td>4</td>
<td>5.2</td>
</tr>
<tr>
<td>50-55</td>
<td>3</td>
<td>3.9</td>
</tr>
<tr>
<td>55-60</td>
<td>3</td>
<td>3.9</td>
</tr>
<tr>
<td>&gt;60</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td>Don’t know</td>
<td>9</td>
<td>11.7</td>
</tr>
<tr>
<td>Education</td>
<td>Frequency</td>
<td>%</td>
</tr>
<tr>
<td>No formal qualification</td>
<td>19</td>
<td>24.7</td>
</tr>
<tr>
<td>Primary School</td>
<td>46</td>
<td>59.7</td>
</tr>
<tr>
<td>Secondary School</td>
<td>12</td>
<td>15.6</td>
</tr>
<tr>
<td>Tertiary</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Occupations *</td>
<td>Frequency</td>
<td>%</td>
</tr>
<tr>
<td>Oyster collector</td>
<td>31</td>
<td>29.2</td>
</tr>
<tr>
<td>Fisherman</td>
<td>30</td>
<td>28.3</td>
</tr>
<tr>
<td>Others</td>
<td>22</td>
<td>20.7</td>
</tr>
<tr>
<td>Teacher</td>
<td>12</td>
<td>11.3</td>
</tr>
<tr>
<td>Employed</td>
<td>11</td>
<td>10.3</td>
</tr>
<tr>
<td>Student</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Place of birth</td>
<td>Frequency</td>
<td>%</td>
</tr>
<tr>
<td>BANP</td>
<td>61</td>
<td>79.2</td>
</tr>
<tr>
<td>Outside the BANP</td>
<td>16</td>
<td>20.8</td>
</tr>
</tbody>
</table>

* Some of the respondents indicated they have more than one occupation.

About 60% (46) of the respondents had attended primary education, 25% (19) had no formal education, 16% (12) had attended secondary school, and none had a tertiary education. Those who had attended secondary school were teachers and are from outside Bazaruto Island. The Bazaruto communities can be characterized as being dependent on natural resources and with limited cash income and are generally poorly educated.
5.2 Impressions of the impact of tourism revenue distribution on communities

During the interview with the Park Warden, he indicated that before government legislation was established fixing distribution at 20% of tourism revenue, as much as 50% of tourism revenue was distributed to the communities. However this was an informal and irregular system and different operators managed the funds differently. Some transferred funds directly to communities, while others deposited the funds in the BANP; still others withheld the money. There was no clear mechanism for tourism revenue distribution and this had impacted negatively on relationships among all stakeholders, such as communities, tourism operators, park administrators, local government and central government. The information gathered from this interview was compiled into Table 8 which shows the distribution of tourism revenue to communities from various sources between 2003-2005.

<table>
<thead>
<tr>
<th>Year</th>
<th>Pestana Bazaruto</th>
<th>Indigo Bay</th>
<th>BANP</th>
<th>Others</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>-</td>
<td>9,197</td>
<td>-</td>
<td>-</td>
<td>9,197</td>
</tr>
<tr>
<td>2004</td>
<td>583</td>
<td>2,051</td>
<td>8,681</td>
<td>1,656</td>
<td>12,971</td>
</tr>
<tr>
<td>2005</td>
<td>1,835</td>
<td>6,479</td>
<td>-</td>
<td>5,360</td>
<td>13,673</td>
</tr>
<tr>
<td>Total</td>
<td>2,418</td>
<td>17,727</td>
<td>8,681</td>
<td>7,016</td>
<td>35,841</td>
</tr>
</tbody>
</table>

The key informant from the BANP management indicated that currently the effective mechanism for transfer of revenues from tourism operators to local communities is through the establishment of an association responsible for receiving, allocating and managing these funds on behalf of the community it represents. In Bazaruto Island, within the three settled community zones (Sitone, Zenguelemo and Pangaia), the TYA was established for this purpose. At first, this association did not deliver tangible development benefits to communities. There was a serious financial problem created by the president of the association. There was also a lack of transparency in the application of tourism revenue funds. For example, financial statements were not presented and there was no discussion of financial matters with the other members of the TYA, nor the communities.
The key informants also indicated that a park management duty is to collect the funds from the tourism operators (i.e. Pestana Bazaruto and Indigo Bay lodges) and to deposit this into the community account for the three communities. How and when this money should be used is not a BANP management responsibility but the responsibility of the communities and the TYA. The BANP representatives indicated that the legislation is not clear as to how the 20% should be used by communities; and this is a concern.

The key informants indicated, however, that despite all the above constraints, the funds from tourism have been used for social and economic development of the community for social infrastructure, such as schools and a dispensary. They noted also the funds are being used to offer scholarships for pupils selected from the communities to continue with high, that is, secondary school education on the mainland. Since 2004, the bursary program has assisted 78 students. Furthermore, the funds are used to offer micro-finance for community projects aimed at income generation and economic upliftment.

The key informants reported that apart from the 20% tourism revenue, BANP is implementing CBNRM programs to assist communities in adopting alternative livelihood activities to reduce pressure on the marine and terrestrial resources within the park. Some of the projects are:

- **Development of beekeeping and honey production:** This project did not produce good results, due to a lack of assistance, during the first phase, from the skilled and experienced mentor. New attempts are underway with an experienced person to proceed with this activity.

- **Sewing and embroidery training for 6 (six) females:** This skills training enables females to use sewing and embroidery to start businesses. At the end of the course they were each provided with a sewing machine and complete kits to start their businesses. Five (5) of the female trainees managed to finish the course, but only 3 have started their businesses, the rest abandoned the program. Various reasons seemed to have contributed to the three female trainees abandoning the program. The main reason was cyclone Favio, which destroyed the course venue and interrupted the training. When the building was
rebuilt, one trainee did not return to finish the course; the other two trainees did not return because of their husbands did not want their wives far away from their families for long periods of time. All the women who abandoned the training program were not serious about the project, the training cost a total of USD 950. See appendix E figure 16.

✓ **Scholarships for selected students from local communities:** The CBNRM is giving opportunities to grade 5 students to continue with a high school education on the mainland; since 2004, the program has assisted 78 students. Currently, this project is supported by TYA using the 20% tourism revenue.

✓ **Carpentry skills training for six (6) islanders:** All the trainees completed the training and have received carpentry tool kits and equipment to start working. Currently only 4 are now working in the hotels. The rest have abandoned the project.

✓ **Masonry skills training:** A total of six (6) men were trained in masonry skills. Each trainee received masonry kits to start businesses. All six (6) are now employed at hotels around the BANP.

✓ **Fishermen association in Bazaruto Archipelago:** This association was established to give opportunities to the fishermen to control and use the marine resource wisely. Some of the control strategies included: implementation of resting periods, a closed season to allow fish to recover; and restricted areas for oyster collecting, to allow these to be harvested at a sustainable size and rate. The process is incomplete because all the documentation has been submitted to the Provincial Governor for endorsement and they are awaiting the publication of the outcome in the Boletim da Republica (BR). Then, after legalization, the Technical Team will assist in the election of a social structure to implement the legislation.
Micro-finance for projects: Communities have opportunities to submit projects for funding. The proposed projects are first analyzed and approved by the TYA committee. The TYA awards funds to the applicants directly as a loan attracting an interest rate of 10%. Loans are to be repaid with interest within six months.

5.3 Economic impact of tourism revenue on communities

The financial information presented in this section was compiled from the interviews held with key respondents from BANP and the hotels. In Mozambique, the aim in using the 20% of tourism revenue is to uplift local community livelihoods through income generation, employment and infrastructure development; this is the case in BANP. From 2003 to 2009, the total amount of tourism revenue distributed to the three communities was US$ 67,191.

Table 8 shows the total income from tourism revenue covering the period 2003-2005. It was compiled based on the information gathered from the interview with the Park Warden; the data pertains to the period before the implementation of the 20% policy. The total revenue distributed to the three communities of the Bazaruto Island was US$ 35,841.

However, at that time there was an informal system of allocating tourism revenue to the communities so contributions were inconsistent. In 2003, for example, as shown in Table 8, Pestana Bazaruto lodge did not contribute any money to any community. The lodge also appears to have made the lowest contributions overall, only US$ 2,418 over three years was allocated to communities, while Indigo Bay lodge contributed US$ 17,727 during the same period. In 2006-2009, for example, the expenditure of tourism after the application of the 20% policy is shown in Table 9 (which was also compiled from the interview with the Park Warden). After the application of the 20% policy, the total of funds allocated to the three communities in Bazaruto Island and gained from Bazaruto and Indigo Bay lodges totaled US$ 31,350. In this case, the contribution from Pestana Bazaruto was close to that of Indigo Bay.

This amount was distributed to the three communities of Sitone, Zenguelemo and Pangaia, and used in various activities for their benefit. The distribution was according to the population. For
example, Zenguelemo, the largest community with 981 inhabitants received the highest amount. This was followed by Pangaia with 810 habitants and lastly by Sitone with 790 habitants Table 6 (Section 3.2). Table 10, compiled from the interview with the Park Warden, lists how the funds were used.

Table 9: Tourism revenue distributed to communities from 2006-2009

<table>
<thead>
<tr>
<th>Year</th>
<th>Pestana Bazaruto (US Dollars)</th>
<th>Indigo Bay (US Dollars)</th>
<th>Total (US Dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>800</td>
<td>2,000</td>
<td>2,800</td>
</tr>
<tr>
<td>2007</td>
<td>4,200</td>
<td>6,000</td>
<td>10,200</td>
</tr>
<tr>
<td>2008</td>
<td>7,300</td>
<td>5,400</td>
<td>12,700</td>
</tr>
<tr>
<td>2009</td>
<td>2,500</td>
<td>3,150</td>
<td>5,650</td>
</tr>
<tr>
<td>Total</td>
<td>14,800</td>
<td>16,550</td>
<td>31,350</td>
</tr>
</tbody>
</table>

Table 10: Projects developed with 20% of tourism Revenue

- Payment for scholarship for 16 students for high school education in Inhassoro district on the mainland
- Payment for 52 boarding students from Sitone and Pangaia to Zenguelemo (purchase of food and school equipment)
- Construction of two rooms for boarding students (one for females and one for males)
- Construction of four teacher houses
- Construction of a community center for eco-tourism
- Construction of two boreholes for water consumption
- Construction of one room for pregnant women waiting to give birth
- Purchase of student uniforms and stationery
- Distribution of construction material to the communities affected by cyclone Favio
- Payment of salary to the president of TYA
- Payment of salary to the First Aid person

The current system used for tourism revenue distribution to the communities is as follows: the hotel operator collects the tourist taxes; these are then passed to the National Directorate of Conservation Areas (DNAC), which passes the funds to the Park Administration. The Park Administration splits the funds and transfers 80% to the National Fund for Tourism (FUTUR) and the remaining 20% to the community account. Most of the transactions are electronic; cash does not change hands from institution to institution. Additionally, the park also generates its own
tourism funds through entrance fees collected from tourists by the mainland operators. Twenty percent (20%) of these funds are also transferred to the community account. According to the president of TYA, the amount from the tourism revenue was inadequate to cover all the basic needs of the three communities. He indicated that this is one of the reasons the communities do not see tangible benefits from the tourism revenue on Bazaruto Island.

As noted earlier in Chapter 3 (section 3.4.3), part of the 20% that is payable to the community account comes from the revenue generated by park entrance fees. These are paid through the two hotels serving as tourism operators on Bazaruto Island; the fees are collected from the guests. All 77 respondents mentioned that the Bazaruto Island has two lodges, the Indigo Bay in the south of the island, including Zenguelemo and Pangaia (Figure 11); and the Pestana Bazaruto lodge in the north, including Sitone community and the park headquarters. The respondents feel these lodges should economically and socially benefit local communities through job opportunities, craft sales to tourists and infrastructure development, including schools, health care, water supplies and transport to and from the mainland.

According to key informants at these hotels, the pristine nature of the Bazaruto Island, fishing opportunities, diving and snorkeling on pristine reefs, an unspoiled environment and the isolation attract the tourists currently visiting the island. Table 11, which was compiled from the interviews with the tourism operator at Indigo Bay Lodge, presents the number of tourists visiting the park through that lodge. In 2009, the Indigo Bay Lodge received a total of 5847 tourists from five different countries.

Table 11: Indigo Bay tourist’s visitors per country during the period of one year (2009)

<table>
<thead>
<tr>
<th>CODE</th>
<th>NAME</th>
<th>ADULTS</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZA</td>
<td>South Africa</td>
<td>2949</td>
<td>35,08</td>
</tr>
<tr>
<td>UK</td>
<td>United Kingdom</td>
<td>1320</td>
<td>14,43</td>
</tr>
<tr>
<td>MZ</td>
<td>Mozambique</td>
<td>599</td>
<td>7,28</td>
</tr>
<tr>
<td>DE</td>
<td>Germany</td>
<td>579</td>
<td>6,37</td>
</tr>
<tr>
<td>PT</td>
<td>Portugal</td>
<td>400</td>
<td>4,48</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>5847</td>
<td>67,64</td>
</tr>
</tbody>
</table>

As shown in Table 12, which was compiled from the interview with the tourism operator at Pestana Bazaruto Lodge, between January and November 2009, the lodge hosted a total of 4603
visitors from 29 different countries. One thousand, three hundred and seventy six (1376) of these visitors were from South Africa, the country with the largest number visitors to the lodge. This was followed by Portugal with 888 visitors. Malaysia had the lowest number of visitors with one tourist.

Table 12: Pestana Bazaruto tourist’s visitors per country during the period of 01/11-24/11/09

<table>
<thead>
<tr>
<th>Country of residence</th>
<th>Total number of visitors</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Africa</td>
<td>1376</td>
</tr>
<tr>
<td>Portugal</td>
<td>888</td>
</tr>
<tr>
<td>Italy</td>
<td>427</td>
</tr>
<tr>
<td>UK</td>
<td>357</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>263</td>
</tr>
<tr>
<td>Mozambique</td>
<td>209</td>
</tr>
<tr>
<td>Germany</td>
<td>189</td>
</tr>
<tr>
<td>France</td>
<td>176</td>
</tr>
<tr>
<td>Netherlands</td>
<td>88</td>
</tr>
<tr>
<td>Sweden</td>
<td>83</td>
</tr>
<tr>
<td>Canada</td>
<td>63</td>
</tr>
<tr>
<td>Australia</td>
<td>58</td>
</tr>
<tr>
<td>England</td>
<td>51</td>
</tr>
<tr>
<td>Belgium</td>
<td>51</td>
</tr>
<tr>
<td>USA</td>
<td>41</td>
</tr>
<tr>
<td>Russia</td>
<td>39</td>
</tr>
<tr>
<td>Norway</td>
<td>36</td>
</tr>
<tr>
<td>Spain</td>
<td>27</td>
</tr>
<tr>
<td>Namibia</td>
<td>23</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Country of residence</th>
<th>Total number of visitors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Switzerland</td>
<td>21</td>
</tr>
<tr>
<td>Austria</td>
<td>20</td>
</tr>
<tr>
<td>Brazil</td>
<td>15</td>
</tr>
<tr>
<td>Poland</td>
<td>15</td>
</tr>
<tr>
<td>Argentina</td>
<td>12</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>11</td>
</tr>
<tr>
<td>Not Specified</td>
<td>11</td>
</tr>
<tr>
<td>Ireland</td>
<td>9</td>
</tr>
<tr>
<td>Angola</td>
<td>8</td>
</tr>
<tr>
<td>Ukraine</td>
<td>7</td>
</tr>
<tr>
<td>Belarus</td>
<td>5</td>
</tr>
<tr>
<td>Hungary</td>
<td>5</td>
</tr>
<tr>
<td>New Zealand</td>
<td>5</td>
</tr>
<tr>
<td>Denmark</td>
<td>3</td>
</tr>
<tr>
<td>Japan</td>
<td>3</td>
</tr>
<tr>
<td>Mexico</td>
<td>3</td>
</tr>
<tr>
<td>Chile</td>
<td>2</td>
</tr>
<tr>
<td>India</td>
<td>2</td>
</tr>
<tr>
<td>Malaysia</td>
<td>1</td>
</tr>
</tbody>
</table>

TOTAL 4603

These visitors to both lodges all contributed to the island and Mozambican economy.

However, the results from the group discussion as well as formal interviews with the hotel management indicate that about 73% of the employees in the two lodges are from the mainland and only 27% are workers from local communities because many locals are illiterate. The hotel management maintains the local islanders are traditional fishermen, who prefer traditional activities and did not want to adapt to the norms and ethics of an 8 to 5 routine, with a monthly wage. There had been many opportunities for islanders to apply for employment, but most did not apply. Some did apply and were appointed but left these positions shortly after being
employed. The lack of education and English skills is another barrier for employment; the mainland employees have a better education and language skills than the islanders. However, most of the islanders are more capable than the mainlanders at sea-based positions, such as skippering, so are hired in that capacity. The tourism operators suggested the islanders should focus on educating their children so they will benefit from hotel employment.

Hotel management mentioned that apart from 20% of entrance fees, communities derive benefits from the building and rehabilitation of infrastructure such as schools, a hospital, and water supplies and especially transport to transfer the sick to hospitals on the island and mainland. For example, Indigo Bay lodge have: constructed two schools using both local and conventional materials; are in the process of rehabilitating the Zenguélemo community health care clinic; and food is purchased for island communities over the Christmas season. Pestana Bazaruto lodge have constructed one clinic in Sitone using conventional materials; and have also roofed two schools and installed two boreholes. Inspection of hotel financial records showed that most of the money for these projects was from tourist donations. It should be noted that community group discussions indicated dissatisfaction with the location of the clinic, as it is far from where islanders live; and does not yet operate because the government has not sent a nurse to provide the essential health care services.

The hotel tourism operators were asked their perception of improvements in local communities as a result of 20% tourism revenue and responded that there are no tangible changes in the communities. The Assistant Director of Pestana Bazarut Lodge feels benefits and positive change would be possible if the funds were appropriately used. For example, if an engine-powered boat for transport, a clinic with a nurse or First Aider, micro-finance for income generating projects and a community shop to provide low-priced items were provided. He also highlighted the need for stakeholder involvement in the management of community funds, regular fund transfers from tourism operators to BANP and to the community account. That is, all communities, park management and tourism operators need to be involved as stakeholders. At present funds are managed only by the TYA with no monitoring of other stakeholders. The TYA president also confirmed that funds are not transferred regularly.
Figure 10: Indigo Bay Lodge
Photo by: Ricardina Matusse

5.3.1 Community benefits from tourism revenue on Bazaruto Island

The majority sample of respondents indicated that tourism revenue distribution has a negative impact on communities because these funds have not stimulated the economy of communities in terms of work opportunities and local businesses. Figure 12 shows that of 77 respondents 46 (60%) do not see any benefit from tourism revenue (See Appendix D Table 16). Thirty-one (31) respondents (40%) do benefit from the 20% tourism revenues, albeit indirectly.

For example, in Pangaia, of 20 respondents, 12 (60%) have benefitted through hotel employment, the education of their children and the micro-finance for projects. These respondents were aware the employment was not a benefit from the revenue-sharing program. In Sitone, 9 (40.7%) respondents had benefited only through infrastructure development, such as a school and transport to the main land and not through hotel employment. In Zenguelemo, about 73% (22) respondents had experienced no benefits from tourism revenue; nor was there any transparency around fund application by the TYA. For example, there has been no transparency around beneficiaries chosen for micro-financed projects and it seems as though the prosperous are chosen, leaving the poor further disadvantaged. One of the key findings from the group discussions is that the community wants work opportunities in addition to the other benefits from the 20% tourism revenue. This revenue for improved livelihoods should be prioritized as follows: improved education, staffed clinics, transport, both among the islands and to the mainland, micro-finance for projects and the provision of shops with basic items.
Respondents' perceptions of employment by the hotels and BANP

The hotels and BANP are the two main employers on the island because the choice of employees and the manner of employment directly affect the local communities. Employment practices impact on perceptions around the economic and other benefits derived from the park, particularly the perceptions of the local communities.

The communities were asked if they benefit from the hotels, in terms of job opportunities. In Sitone, of 27 respondents, 18 (67%) have no employment from the Pestana Bazaruto Lodge. In Zenguelemo, of 30 respondents, 16 (53%) have employment at Indigo Bay Lodge. In Pangaia, of 20 respondents, 17 (85%) have employment with Indigo Bay Lodge. (See Figure: 13 and Appendix D Table 17). Most of the respondents employed at the hotels do not have permanent work as a contract system is used. The contract duration varies greatly from two to three or six month or even longer, depending on the nature of work offered; minor repairs tend to have short contracts, whereas new constructions have longer contracts.
The Sitone respondents stated that the Pestana Bazaruto Lodge tourism operator usually considers outsiders for work opportunities, so the islanders are unhappy because the lodge disregards the local communities. The locals have a poor relationship with the hotel management. Another problem is that local community members are not allowed to sell crafts to tourists at the hotel. These crafts must be sold at a small curio shop built far from the lodge by the hotel management; the curio shop is not near the tourist market, the hotel.

Community respondents and the tourism operators seem to have different perceptions about employment opportunities at the lodges. The community respondents generally feel the lodges do not offer any meaningful employment and give preference to outsiders; whereas, the tourism operators say employment is offered to local residents but the islanders are traditional fishermen and prefer to continue exclusively with the traditional activities of fishing and oyster collection. They also say the islanders do not trust western style employment practices, such as monthly wages because traditional activities provide a daily income. The tour operators agree that employment offers are limited to those with a sufficient level of education and English skills; most locals do not meet these requirements.
The hotel Human Resource personnel confirmed that the illiterate members of community do not have work opportunities because only sufficiently educated and skilled workers are required, so these positions are mostly given to those from outside the island. There is a perception among some of the community respondents that bribes and other incentives are used by the outsiders to procure hotel employment. The study could not confirm or refute this claim. Indigo Bay employed a total of 220 workers, 66 (30%) were from Zenguelemo and Pangaia, the closest communities. Bazaruto Lodge employed a total of 62 workers; 10 (16 %) are from Sitone, the community nearest that lodge. It was also found that the employed from local communities are limited to menial positions providing low wages, while foreigners, for example, non-Mozambicans fill the lucrative positions.

In the female focus group discussion, respondents said there are no opportunities for females to be given hotel employment so they perceive that they are being disregarded by the hotel tourism operator. For example, one of the women said: “We women, if we ask for job, they say jobs are only given to people who are skilled, who speak Portuguese, a bit of English and not more than beyond 25years old. Also our products such as oysters, crabs and lobsters are rejected by the hotels’ management when we try to sell them. This is not the case with the men’s products. So what we need is to form an association composed of women for micro-finance for projects”.

Additionally, in this focus group discussion it was mentioned that generally in meetings, including community and park meetings, women are not given opportunities to contribute to discussions; only men actively participate in decision-making.

The BANP is the other main employer on the island with 31 workers, 18 (58%) are from Sitone, Zenguelemo and Pangaia. According to the park warden, most of those employed from these communities are employed as field guides. While these are permanent positions, they are the only ones available to them because literacy and education are required in the more valued positions in park management. It had been the government plan to give more job opportunities to the communities as a part of the economic, social and conservation benefits; however, lack of education and skills has thus far prevented this.
5.3.3 Commerce

Commerce on the island is informal and is done in small shops constructed from local materials; they are known as barracas. The main products sold at the barracas are: sugar, soap, maize, oil, bread, beans, alcohol, paraffin and other important items, such as clothes. These products are purchased from the mainland and the prices are high so most of the communities cannot afford to buy at these shops. The reason for the high prices is a combination of the lack of transport and the cost of transport to and from the island.

The respondents indicated that no tourism revenue was applied to improving this aspect of commerce on the island. They did suggest that funds could be used to build a community shop where products could be sold at reasonable prices.

5.3.4 Micro-finance for projects through tourism revenue

Micro-financing of projects is being implemented as one of the economic benefits of the 20% of tourism revenue. Communities are given an opportunity to present their projects to be analyzed and then approved by the TYA committee. If approved, the applicants get a loan from the association to start a business. The loan must be repaid within six months and is subject to a 10% interest rate. In the women’s focus group discussions, the respondents complained about the loans given to communities to start projects because in practice access to the money is limited and the process is not transparent. Preference is given to the prosperous, while the very poor and those with real needs are overlooked. For example, during the female group discussion, it was mentioned that they had idea that to obtain micro-finance they could form an association comprised of women to start a business to generate income. In any case, although they understand the application process, they say they are not given opportunities to present their projects and lack of knowledge to write a project proposal.

This focus group cited two projects they wish to establish. One is to organize and run a small market for craft and curio trade, where all member artisans would be able to sell products to tourists; the other is a financing scheme called Xitike. This business committee would arrange
with TYA for a dedicated fund, essentially an interest-free loan to be used by Xitike’s members. The members of Xitike could then support and assist each other in using these funds. The intention is for members to receive a monthly portion of the dedicated funds to be applied to a business. After three months the amount borrowed would be returned to TYA so all members could benefit. The community officer indicated that female access to micro-finance is influenced by the prevailing social status of women in the community. Traditionally on the island, women are ignored by men and are not given opportunities to express feelings and ideas. Effectively, the only business women are allowed to do is oyster and crab collection and small-scale agriculture.

The TYA president identified several factors resulting in few community members having access to micro-credit. Three have to do with TYA funding: the low amount of funds received; the lack of consistency in the receipt of funds; and too much bureaucracy in the transfer of the funds to the community account. A fourth is the delay in repayments from community members awarded micro-loans; they do not return the money in the stipulated six month time frame to give this opportunity to other community members to benefit from the loan. Additionally, the loan is only given to the communities living in BANP and not extended to outsiders. Since the implementation of this project in 2008, only 5 people benefited from the credit and applied for different activities (Table 13).

**Table 13: Allocation of Tourism Revenue and their application (micro-credit projects)**

<table>
<thead>
<tr>
<th>Community-Beneficiary</th>
<th>No. of Community members receiving loans</th>
<th>Application of micro-credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pangaia</td>
<td>4</td>
<td>Purchase two engine for boat, commerce</td>
</tr>
<tr>
<td>Zenguemelo</td>
<td>1</td>
<td>Commerce/trading (e.g retail trading)</td>
</tr>
<tr>
<td>Sitone</td>
<td>0</td>
<td>Still in process</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>5</strong></td>
<td></td>
</tr>
</tbody>
</table>

5.4 Social Impacts of tourism revenue

Five areas, in terms of social impacts of tourism revenue were explored: education, infrastructure development, health care, water supply and commerce. Education, infrastructure and health care were anticipated in the research design. Water supply and commerce arose from the research in the field.
5.4.1 Education

Of all the benefits resulting from community development using tourism revenue, the respondents placed greatest value on improved education. About 85% of the respondents supported the idea of continuing to use tourism revenues to provide education for adults and the youth, but giving more attention to the latter. The TYA president and community respondents mentioned that the application of the revenue to the education of community children is ranked as the first priority. The respondents linked education to a number of factors. First was the general objective of educating their children to give them future employment opportunities, such as teaching, nursing and other professions, such as in economy. Second, they see their children employed in these positions on Bazaruto Island. Third, implied was the desire to avoid bringing workers from outside the island to fill these posts, creating high levels of unemployment in the area.

According to the results from the group discussion, this education issue is in effect, an oppression issue. Lack of education prevents islanders from getting lucrative work, thus encouraging employers to hire outside the island, leading to continuing unemployment on the island and finance leaving the island; and even results in the denial of access to micro-credit. Currently, poor education discourages the communities, but also drives their desire to educate their children to replace the teachers, the nurse and other professionals from outside the island. Finally, they identified education as an important way to improve the capacity of individuals to engage with and contribute to their own and community development.

Only primary school education is available on the entire island. For secondary education, children must study off the island. Sitone and Pangaia have classes teaching grade 1 to 5. Zenguelemo has grades 1 to 7. In terms of teachers, Sitone and Pangaia have three teachers each and Zenguelemo has six teachers. All of the teachers are from outside the island. During the group discussion, it was mentioned that teachers from outside the island did not attend classes regularly as they are often away from Bazaruto, leaving the pupils unattended. According to the respondents, this situation makes them doubt the results at the end of the year; they do not think they are “real results”, but are fictitious.
According to the information accrued from the key informant (Chefe do Posto), before the implementation of the tourism revenue policy, education in the island was poor and most were illiterate. With the use of tourism revenues, education is increasingly available. Before the application of tourism revenue, communities gave little value to education and there was little opportunity for education, there were few schools on the island and few children could attend. Now, at least there are primary schools in each community. It was confirmed that 60% of the respondents now have a primary school education. The level of primary school education before the application of tourism revenues could not be established but it is evident that there has been a significant increase due to the presence of primary schools not previously in existence. It was also found that only 25% of the respondents have no education at all, this, according to the respondents is much lower than before. See Appendix D Table 18.

In coordination with BANP, the TYA uses tourism revenues to offer scholarships for grade 5 pupils to further their studies beyond grade 5 in Inhassoro District on the mainland. Sixteen (16) students are currently studying using these scholarships. According to the BANP community officer, another four students have already completed secondary level education using these scholarships. Two are now employed by the hotel and a third is a teacher on Benguerua Island. Another student has used a scholarship to complete technical training (tecnico medio), generally equivalent to secondary education; he is employed outside the island. Finally, the TYA is supporting the boarding of 13 pupils from Sitone and Pangaia communities at Zenguemelo, the only community school offering grade 6 and 7.

Table 14 highlights the distribution of scholars on Bazaruto Island according to grade, gender and village based on data gathered from the interviews with teachers of Bazaruto Island. From a total of 2581 inhabitants, 604 (23.4%) are students aged between 7 and 15 years. In Sitone and Pangaia, most of the students are female, a different situation from previous years. Previously young girls at the age of 10-12 normally abandoned school for marriage. Now, however, girls continue school beyond 12 years. This is shown by the percentage of girls in grades 4, 5, 6 and 7, roughly corresponding to the ages of 10, 11, 12 and 13, remaining in school. This is approximately the same percentage of girls in the communities, clearly indicating that most of the girls are at school. Additionally, most 16 year old school boys used to abandon school to start
businesses as fishermen, others moved away to find work in urban areas and others made immature marriages. Furthermore, the adults have now started to understand the need for education; since 2009, they have started adult education classes (source from the two teachers of Sitone and Zenguelemo).

Table 14: The distribution of scholars by grade, gender and village

<table>
<thead>
<tr>
<th>Gr</th>
<th>Sitone</th>
<th>Zenguelemo</th>
<th>Pangaia</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>F</td>
<td>Total</td>
<td>M</td>
</tr>
<tr>
<td>1</td>
<td>24</td>
<td>13</td>
<td>37</td>
<td>22</td>
</tr>
<tr>
<td>2</td>
<td>17</td>
<td>26</td>
<td>43</td>
<td>28</td>
</tr>
<tr>
<td>3</td>
<td>16</td>
<td>9</td>
<td>25</td>
<td>18</td>
</tr>
<tr>
<td>4</td>
<td>12</td>
<td>19</td>
<td>31</td>
<td>25</td>
</tr>
<tr>
<td>5</td>
<td>4</td>
<td>11</td>
<td>15</td>
<td>17</td>
</tr>
<tr>
<td>6</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>17</td>
</tr>
<tr>
<td>7</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>73</td>
<td>78</td>
<td>151</td>
<td>142</td>
</tr>
</tbody>
</table>

Key: G: Grade; M: Male; F: Female; n/a: not applicable (grades not offered in those communities)

5.4.2 Infrastructure development

Infrastructure development represents an important component of the economic and social impacts on the BANP communities. However, the respondents did not identify any significant change to community infrastructure as a result of using tourism revenues. As noted in Section 4.4.1 the respondents noted that two houses for children (in Zenguelemo), two houses for teachers (in Sitone) and a clinic (in Sitone) were built using 20% of tourism revenue. However, local materials were used and the clinic was destroyed in the 2007 cyclone, before the research was undertaken. A second clinic was built in Zenguelemo, again using local materials.

In the three communities of the study, it was observed that community infrastructure, such as community houses and social infrastructure, including schools, health care, shops and roads are in poor condition.
5.4.3 Health care

The respondents identified health care as the most important benefit from tourism revenue after education. There are three clinics in the area. One was built in Sitone by the Bazaruto Lodge using conventional materials, but, as noted earlier, is far from the people, there is no health care worker and it is not used. A second clinic was built by Indigo Bay Lodge at Zenguelemo, also using conventional materials; it is staffed by two government health workers (qualified nurses), and the community is happy with this clinic. The third clinic was also built at Zenguelemo using tourism revenue and using local materials; it provides only primary health care and the health worker is paid from tourism revenue funds; he is expected to be available for all three villages. This improvement in health care using tourism revenue is limiting; for example all maternity cases are handled at the Zenguelemo clinic where the nurses work – this is far from most of the communities.

When asked for community priority needs in terms of benefits from tourism revenue, 90% of the respondents were in favor of each community having proper health care facilities. Pangaia has no facility at all, the second clinic in Zenguelemo needs to be upgraded to handle more that only primary health care, and, because the one in Sitone is badly situated and unused, a new facility is needed, including staff. They also identified the need to train local students to be nurses to work in the community.

According to the nurse interviewed, due to the distance from the community areas to the clinic, most of the people use traditional medicine from local plants. Some prefer to be attended to at Inhassoro and Vilanculos Districts on the mainland. According to the nurse interviewed, the most common illnesses found in the communities are malaria, diarrhea, dermatitis and HIV. HIV is detected mostly in pregnant women not born on the island. The treatment for all these ailments is elementary; it is referred to as “Kit B”. For treatment requiring the intervention of a doctor, patients are transferred to the mainland hospitals at Inhassoro, Vilanculos and Inhambane. However, this is difficult due to the lack of transport. Additionally, the nurse interviewed indicated that most pregnant women do not use the maternity health centre, preferring to give birth at home. Consequently, the mortality rate is high. The nurses attend 2-3 births per month.
Health-related issues dealing with food security and with transport were identified (See section 4.5.5). There are a number of orphans and elderly community members often not having enough food. The focus group suggested that tourism revenue should be applied monthly to purchase food for the orphans and the elderly. Some of the participants also mentioned that during droughts, tourism revenue should be used to help needy households buy food. There was no consensus on this as some argued that purchasing food should be a government responsibility.

5.4.4 Water supply

The respondents also identified water supply as important, thus tourism revenue has a potential social impact. To date, two pumps have been installed using tourism revenue; one in Sitone, still working and one in Pangaia, not working. Tourism revenue has not been applied to any other water supply projects.

In the focus group discussion, it was further explained that most of the water pumps constructed by the hotels and the park are no longer working. For example, in Sitone, only one borehole is working and most obtain water from the park headquarters and/or from water catchments. They also mentioned that the maintenance of the water pumps and borehole is the responsibility of the community but there are no funds to fulfill this responsibility. The key park informant identified an additional problem with water. Due to the distance between one community families to another, it is difficult to plan a place to establish a water supply to cover all the affected communities.

5.4.5 Transport

It is shown that 100% of respondents have transport problems. Sitone has only one boat, recently received but not meeting the transport needs of the community. Another identified problem is the high cost of transport; it is unaffordable for these communities. Zenguelemo has two privately funded engine-powered boats making regular trips to the mainland and Pangaia has no boat so they depend exclusively on Zenguelemo and Indigo Bay transport. Due to this
unavailability of transport, many community members requiring a doctor can die before reaching the mainland. However, the lodges and BANP generally are willing to provide free transport in such emergencies.

No tourism revenue has been allocated to improving transport on the island. The respondents feel tourism revenue should be used to buy a community boat for reasonably priced transport so all community members could afford transport. The purchase and management of this boat should be community-driven.

5.5. Conservation impact of tourism revenue

Tourism in protected areas contributes to biodiversity conservation by providing sufficient revenue for community members to value and conserve nature as an income source. In the interviews and group discussions it was indicated that the respondents have a good general awareness of the park and natural resource conservation. The respondents also understand the reason for the conservation of these resources is to benefit from tourism revenue now and in the future.

5.5.1 Impact on natural resources management

Community respondents were questioned about the importance of natural resource conservation in their areas; the majority (84.4%) responded positively. “We know the value and importance of conserving our resources, both marine and terrestrial. The park authority is making effort to pass the message to the communities through meetings and through door-to-door visits. We now know that dugong and turtles are key species from the perspective of the park authority and tourist, and that are protected by the law. We know that by conserving the marine and terrestrial resources, tourist will come to enjoy those resources and will pay entrance fees that will benefit the communities.”

Respondents were questioned about the control of the resource before the BANP was established. Sixty percent (60%) indicated that the government used to control the resources; and
23% indicated that there was no control, (Sees Appendix D Table 15). Before BANP was established, communities were free to use the resources as they wanted. According to them, there was no overexploitation; the resources were available and sufficient. The communities were asked if they are satisfied with the current BANP control over the natural resources. Most of the respondents, (89.6%) stated they are happy with the current control of the available resources, because it helps in wise utilization for present and future generations. Additionally, when asked if they are allowed to use the natural resources in the park, 69 (89.6%) indicated that they are allowed to use the resources but with some restrictions. They noted, for example, there are some species protected by the law, such as the dugongos, marine turtles, dolphins and whales, as well as all terrestrial resources. They also mentioned that resource needs to be sustainable to avoid its disappearance. Due to the public education received from Park management “We know that poaching is prohibited by the law; the few species that park has, needs our protection for present and future generation”. Figure: 14 shows the perceptions of the respondents in the three communities regarding access to, and use of, the available natural resources.

The park management referred to positive changes in the communities such as less burning; and the correct use of marine and terrestrial resources resulting from park regulations around
conservation. Related to this, community respondents gave opinions concerning uncontrolled fires. All 77 (100%) of the respondents are aware of the negative effects of fire in the environment. They said that uncontrolled fires destroy the habitat; kill micro-organisms, causes erosion and this kind of damage will negatively affect tourism in the future, to the point where it no longer exists. However, 5.2% of the respondents continue to make uncontrolled fires because they do not see any benefit from conservation. They believe that the money from tourism benefits only a few people. Further, they are aware of the source of uncontrolled fires. All 77 (100%) respondents mentioned that uncontrolled fires are caused by the community members themselves. They identified three key activities that often result in uncontrolled fire: farming, grazing on pastures and activities related to traditional wine extraction.

Another indication of a raised consciousness about the management of natural resources is that communities are now able to provide important data and information on natural resources, such as turtle nets, crocodile nets, fishing, oyster collection, palm wine production, livestock production, trading activities and sand dune movements. Although the information is not yet precise because of a lack of literacy skills, it is still helpful. The key informants noted that the park is trying to train those community members providing this information with the intention of building skills so these trainees can formally take over this function and be employed by the park administration.

Some community groups are starting to understand and implement management decisions regarding sustainable natural resource use, an example fishermen observing a resting period to allow fish stocks to recover. Another example is oyster collectors closing certain areas for a period of time to enable the oysters to multiply and to reach a big enough size, ensuring continued income from oyster harvesting at a later stage.

5.5.2 Impact on Livelihoods

It was found that all 77 (100%) respondents confirmed most of the people living in the Bazaruto Island depend exclusively on marine and terrestrial resources for a livelihood. They ranked the marine resources as the single most important resource for survival. This is consistent with there
being little agricultural production in the study communities; this is largely due to poor soils and park restrictions, and results in few products being produced. Marine resources are a staple food and necessary for income generation. Notwithstanding its importance, most of the respondents mentioned that the quantity of marine resources had decreased in recent times. Most of the respondents feel the main reason for the overexploitation of these resources is because there are limited alternatives for livelihoods. However, some stated they did not know why the resources had declined, suggesting it could be related to rain, temperature and drought patterns.

The respondents identified the main natural resources currently found in and around the three communities. These are divided into marine resources, terrestrial fauna resources and terrestrial flora resources.

5.5.3 Marine and terrestrial resources

According to the respondents the most common marine resources in the Bazaruto Island are: fish, crabs, oysters, dugong, marine turtles, lobster and squid (Figure 15).

![Women collecting oysters in Bazaruto Island](image)

Figure 14: Women collecting oysters in Bazaruto Island
Photo by: Ricardina Matusse

The most common terrestrial fauna resources are small species of mammals such as red-duiker, red squirrel, toed elephant shrew, bushbuck, night ape and monkeys. Also common are reptiles including lizards and snakes. There are also a variety of birds found on the island. These
resources are fully protected by the law and are not allowed to be used for any purpose, such as food and skins.

Communities were asked if there is poaching inside the park. All of the respondents (100%) stated there is no poaching in the park; if a poacher is found, they are subject to some punishment. The respondents added that to avoid this situation, the park authority is educating communities on sustainable use of both marine and terrestrial resources. The BANP management key informants confirmed that there is no poaching in the park.

There a variety of flora resource such as; wild fruits, tubers and medicinal and non-medicinal plants. For example, palm leaves are used to make mats and baskets to be sold to tourists and among community members. Other plants are used for furnishing and thatching traditional and modern housing on the islands, although the earnings from these activities are limited. Wild palms are also used to make traditional wine, known as “utchema” to be sold to community members. Wood is used by the communities, mostly the young men, to construct houses, for firewood and for carving crafts to sell to tourists.

As noted earlier, there is little agriculture on the island. Women farm on a small scale; the main crops are sweet potatoes, beans, cassava and variety of vegetables. Production is entirely for family consumption. With agriculture being so limited, many women have become dependent on oyster collection to generate incomes to purchase other basic items, such as maize meal, oil, clothes and other goods. It was found that the communities are trying to find ways to improve livelihood strategies and not rely exclusively on natural resources, putting pressure on those resources. A number of alternative livelihood strategies have been established, primarily for income generation. These include: landing of boats for transport, fishing and tourist trips; small-scale shops (barracas) trading small items; and informal trading of various items acquired by purchase or barter from the mainland. Trading includes items such as maize meal, rice, sugar, oil, illumination paraffin, clothing and beer.
5.6 Summary of economic, social and conservation impact of tourism revenue

The impact of the tourism revenue policy on the three communities on Bazaruto Island, were investigated. Individual interviews were held with 77 members of the community. Demographically these respondents were born on the island, were mostly male, between the ages of 30-35 and were generally poorly educated with a primary school education being most common. Additionally, focus group discussions were held, involving approximately 45 people composed by oyster collector’s fisherman and TYA committee, to gather more data. Finally, interviews were held with key respondents in the Ministry of Tourism, BANP park management, tourism operator and the local government administration. The findings of these investigations are organized according to economic impact, social impact and impact on conservation.

5.6.1 Economic impact

Most respondents indicated that there is no significant positive economic impact resulting from tourism revenue distribution to the communities. The majority of the community mostly relies for their livelihoods on marine resources, particularly fishing and oyster collection. The funds from tourism activities have not helped to stimulate or diversify the economy of the island communities in terms of work opportunities, and local businesses. While tourism and tourism revenue does result in a few inhabitants working at one of the hotels and getting credit to start small businesses, this benefits only a few.

5.6.2 Social impact

The study revealed some significant social improvement in the three communities, primarily in education and social infrastructure. It was found that people feel education had improved in recent times and this was attributed tourism revenue. Most children are now able to study up to grade 7 on the island as well as being able to continue with higher education on the mainland. The communities seem to be happy to see the funds applied to education because they feel the lack of education precludes them from lucrative work and can even lead to unemployment.
Tourism revenue funds have been applied to build infrastructure, such as schools, clinics, teacher houses and houses for boarding school pupils. These are regarded as significant improvements to the local communities. Despite these improvements, in the study a need improve the physical structures using conventional, as opposed to traditional materials to withstand adverse weather conditions was also identified. There is also a strong desire for tourism funds to be used to provide one clinic in each community. There is a perception that government should provide the qualified personnel and adequate medical supplies.

Other issues also arising from the study related to two social impacts: priorities for tourism funds are community transport and a community shop; also, there is a need for the government to help in the maintenance of water supplies installed at access points by the hotels and BANP.

5.6.3 Impact on Conservation

Significant positive impacts on natural resource conservation, marine and terrestrial were indicated; communities are now starting to understand the value of conserving resources. There appears to be a general awareness about the park and its conservation policies; and the link between conserving resources and benefiting economically and socially from eco-tourism. There is also an understanding that natural resource conservation generates tourism revenue for sustainable community benefit. This confirms the finding that park officials have conveyed to the communities the fundamental message regarding biodiversity conservation.

Conservation is complex, yet the communities clearly identified positive impacts on conservation and themselves are more conscious of the importance of conserving resources. However, they are also conscious that most community members depend heavily on marine resources for income and livelihoods. They conclude, therefore, that conservation is insufficient to sustain livelihoods; also indicated is that tourism revenue should be used to create alternative livelihoods for communities to decrease the pressure on marine resources. Despite an increased awareness about the importance of conservation, it was found there is overexploitation of marine resources. In a similar vein, despite communities have shown some positive changes in making uncontrolled fires, the park management expressed the need to further address public awareness
and training to avoid uncontrolled fires, as some still do occur and pose a threat to the environment. As fires are used as a part of the process to extract traditional wine from the wild palm trees, finding better ways to do this were seen as particularly important.

5.7 Conclusion

The communities are happy that tourism revenue should be used to improve the livelihoods of the Bazaruto Islanders. They understand and value the benefit of having tourism activities in the park and are happy to see tourists in the park. They are also happy with some of the specific outcomes, particularly in education, resulting from using tourism revenue. However, it was found that these communities are not satisfied with the amount of money being invested in improving the communities because it is insufficient for basic community needs. They prioritized education, health and transport as key areas for investment.

While positive and negative perceptions about the impact of tourism revenue on the communities were identified, these perceptions are influenced by community perceptions around the management of tourism revenue funds. Although there is a community structure, TYA, to manage the funds, there is the perception that there is no transparency in this management. Except in the case of education, the communities are generally unhappy with the fund management, that is, the range of projects being funded. Most of the respondents are not informed about the amount received from the park or about the application of funds received. The decision-making is done by TYA and not by the community. The community is not blind to any specific outcomes of applying tourism revenue, such as the improvements to education. Despite positive outcomes, they want to be part of the process and fully informed in managing fund allocations, from the arrival to the distribution of these funds. They called for greater transparency in the whole process. They want to be informed about the amount of funds being received, and they feel the community should decide what to do and not only the TYA management committee.
6.1. Discussion of findings

As shown in Table 7, Chapter 4, the most prevalent age group comprises active inhabitants, that is, the mobile and active. More than half the respondents (57%) are 20-35 year-old males and females born in BANP. These can contribute negatively and positively in the economic, social and conservation impact of tourism revenue. It was observed and the findings around economic activity of this age group suggest that there is a tendency for these community members to explore more resources in the park, leading to damaging the environment through overexploitation of marine and terrestrial resources; increasingly natural resources are under pressure. A low level of education may equate to a low level of understanding the need for resource conservation; and of the benefit value of tourism on the Bazaruto Island. However, it is possible to educate the active group to meet the desired community objectives through: the wise use of tourism revenue; skills acquisition and English education to secure hotel and BANP employment currently occupied by outsiders. This strategy will help to alleviate poverty and to meet the millennium goals in Bazaruto Island, through economic, social and conservation benefits gained from tourism revenue. However the study shows that the greatest impact has been social development. This is followed by conservation in the form of increased understanding of the need for wise and sustainable use of their resources; Economic impact has been very limited. This is addressed more fully in chapter 5.

The systemically integrated nature of the issues raised implies there will be some overlap in the discussion of the three areas of impact. Further, the context of this study was depicted in Figure 2, Chapter 1, again showing the interrelated nature of tourism activities, biodiversity conservation and local communities in protected areas. Thus while the discussion is presented for each of the areas of impact, they must be seen as a collective whole where social and economic improvements support biodiversity conservation and where greater awareness of biodiversity conservation increases the sustainability of social and economic development.
6.2 Economic impact of tourism revenue distribution

In addition to a general discussion on economic impact, this section will also discuss economic impact with particular reference to community expectations concerning employment, community participation and transparency, illiteracy and gender. All these issues were specifically raised by the respondents in the context of economic activity; impact on poverty alleviation is also briefly discussed.

Drumm (2003) stated that globally, tourism is one of the fastest growing and most important economic activities. It contributes to household and state-level incomes, employment and wealth. It also delivers tangible benefits to communities living around the areas where tourism is being developed. Thus, it would be expected that the introduction of a tourism operation on Bazaruto Island should have a significant economic impact on the local economy, in terms of increased incomes and employment. As noted in Section 4.7.1, a key finding was that the communities feel there was little positive economic impact arising from the application of tourism revenue; most people in the BANP communities are not benefiting from tourism revenue. Only a few people have work connected to, or resulting from, tourism activities and the means of livelihood has not changed significantly. The 2581 habitants living in the three communities of Bazaruto Island depend mostly on the use of marine resources for livelihoods; most of the people still derive their income from fishing and collecting oysters. Alternative livelihoods are needed so as to reduce pressure on fishing and oysters collecting.

The participants were clear on differentiating the source of economic impact, particularly with reference to work. Although the study focused on the application of tourism revenue, the findings also included information shared by the respondents about the economic benefit of tourism activities, as separate from economic activity derived from applying the 20% tourism revenue policy. While little work was generated from the application of tourism revenue, 60% of the Pangaia respondents indicated that some from the village were employed at one or other of the two hotels.
Published research on the economic impact of tourism on local communities indicates that the impact can vary significantly. Shackley (1996) suggests that tourism in protected areas should result in income generation, employment, increased infrastructure investment and a better standard of living. In contrast, Eagles, et al. 2002, argues that in developing countries the park entrance fee income is insufficient to provide park management, activities and community development. The results of this study are more in keeping with Eagles, et al. Tourism on Bazaruto Island offers only limited opportunities to local communities to get jobs from the hotels or to benefit from indirect local economic stimulation. Further, what benefit was realized was less than had been expected by the communities.

Illiteracy was found to be a major factor contributing to the lack of hotel employment. Outsiders are better educated and skilled than the local people. Managerial positions at the tourism lodges are occupied mainly by outsiders, so there is limited employment in the tourism lodges for members of the local communities. To increase the benefits of tourism for local communities, local employment opportunities need to be improved. The respondents identified that one way to do this is through improved education. The community members understand the value of education; great efforts are made to ensure the education of the children so in the future they can secure employment at the hotels (See Section 4.9.1). While the communities take on this long-term approach, some more immediate efforts can be made by tourism operators. The WTO (2004) believes tour operators need to offer more part-time work, specifically to enable the illiterate and disadvantaged communities to get employment from the hotels. By providing skills training to the unskilled members of the communities, the tourism operators could contribute to the upgrading of the island education.

The findings around gender issues relative to employment show that women have been largely ignored by the hotels with regard to work opportunities; only a few are employed as housekeepers. Traditionally on the island, women have been overlooked by men and not given opportunities to express ideas and share feelings. This pattern of female exclusion is repeated in other areas of activity on Bazaruto Island and is not an unexpected finding. Most local government staff, community leaders and people of position are men. This is consistent with the
Shepherd (1998) findings that emphasize women are subordinate to men, and usually work harder than men, but are paid less.

Another important finding was that there is no transparency in the use of tourism revenue funds, communities are not informed about the use of funds, and the decisions about of funds is made by the TYA committee and not by the communities. This is contrary to an established agreement stating that decisions should be made jointly by the communities and TYA committee. Furthermore, funds should be equitably distributed but were not. It is argued that equitable distribution will result in positive changes in the community with regard to: attitudes towards conservation; livelihood improvement through job opportunities; and improved health, communication and infrastructure (ART, 2002). The local tourism strategic plan is an important instrument to be used in tourism revenue distribution to maximize benefits to the communities and to ensure equitable benefit distribution (Godde, 1998). Poorly planned revenue distribution and exclusion of communities from the process can result in negative impacts (Tatoglu, 2000). Therefore, effective tourism revenue distribution to communities requires communities to define the benefit (Archibald and Treves, 2001), and such revenue should democratically be allocated (ART, 2002). In the case of BANP, this means involving the rural district council and all the members of the Bazaruto Island communities. Given these arguments underscoring the importance of transparency and community participation, the limited economic impact experienced on Bazaruto Island is not surprising.

Shackley (1996) found that in the Tortuguero National Park in Costa Rica, communities living adjacent to the park did not receive revenue from tourism activities. Whereas, when the Kenyan Wildlife Service was established, the tourism revenue from entrance fees was distributed among local communities; however this revenue was too little to meet community objectives and ambitions. The Bazaruto Island case is similar to that of Kenya: the tourism revenue is insufficient to cover all community needs; there is a lack of consistency; and too much bureaucracy in the transfer of funds to the community account. As a result, in Kenya, entrance fees were raised to satisfy community needs and to cover conservation promotion (Shackley, 1996).
Poverty is also a great issue facing the communities on Bazaruto Island. Complaints of hunger are common in these communities. The community members see a direct link between the tourism revenue and the possibility of overcoming their poverty. They believe that tourism revenue can be used to start income-generating projects; some of these projects have already started (See Section 4.2). Overcoming poverty is also linked to education, health, transport and other issues discussed under social impacts. Tourism revenue is a key element for economic development that could alleviate poverty (WTO, 2004). Globally, tourism alleviates poverty through creation of employment and provision of social services for local communities (Lascurain, no date). Bazaruto Island is well positioned for this possibility.

In considering the potential economic benefit of tourism to local BANP communities, the findings highlighted that tourism revenue has offered fewer opportunities to local communities than were expected by the communities. Lack of transparency and accountability in the use of funds by the TYA committee has created distrust among the local communities and the TYA. Lack of transparency in choosing beneficiaries for micro-finance for projects has made the communities suspicious of the TYA committee. Contributing to the feelings of mistrust and suspicion is the delay the people observe in repayment of TYA loans. Apparently many of those who have received TYA loans do not repay these loans in the time stipulated. The communities read this as collusion, creating further distrust and suspicion. Transparency, participation in these decisions and action are particularly important.

Archibald and Treves (2001) indicated that tourism revenue should be allocated according to community needs in a prioritized and participatory manner, and the funds should be distributed among projects identified by community members surrounding the parks. The success of tourism revenue distribution in communities depends on the involvement of local communities in strategic plans and management, and the value assigned to wildlife as an economic resource (Shackley, 1996). Further, tourism can play a significant role in poverty reduction if included in a larger poverty reduction program. This would include: mainstreaming, integration, equitable distribution of tourism revenue, community empowerment, human rights, commitment and monitoring of community programs (DFID 1999; Yunis 2004; Bolwell & Weinz 2008). These
actions need to be applied in the BANP management to accomplish poverty reduction in local communities.

While the communities acknowledge that fewer than expected opportunities have been realized from tourism revenue, they are convinced that tourism revenue is a key factor in alleviating the poverty among community members. Poverty is complex and involves many role-players, such as governments, NGOs, project managers and researchers as they have the power and resources to effect community development aimed at poverty reduction (Chambers, 1983), this could be useful applied to the Bazaruto Island communities to alleviate poverty.

While tourism can certainly have a positive economic impact, it should be noted, however, that tourism cannot be the sole source of economic development – it will naturally be limited in its impact. Another key to economic development will be diversifying livelihoods from dependence on natural resources and even on tourism.

6.3 Social impact of tourism revenue

Simpson (2007), the UNEP and WTO (2005) all indicated that tourism should aim to convey social benefits to the community. The benefits should include assisting the communities in the construction of infrastructure such as roads, schools and dispensaries; in turn these activities could improve community livelihoods. Benefits should also include improvement to essential services such as water, energy, transport services, and shops and other services such as garages and leisure, entertainment and recreational facilities. The study shows that this is not the case in Bazaruto Island. Tourism revenue had only very limited impact on communities in terms of social infrastructure. There was limited constructed using tourism revenue, and the majority of social infrastructure established was from the lodges and communities members themselves.

The UNEP and WTO (2005) indicated some key elements of tourism revenue impacts. The most disadvantaged and poorest communities, with limited access to those in power should be reached, as should those whose primary resources arise from protected areas, such as parks and
reserves. Again this study shows, the most disadvantaged and poor communities are not benefiting significantly from tourism on Bazaruto Island.

6.3.1 Social infrastructure

In the case of Bazaruto Island, tourism revenue has provided communities with materials to build some social infrastructure, such as schools, a clinic and some essential services, such as water and improvement in education. Although these improvements have been made, the study found that they were inadequate; not enough physical improvements were made and those that were made were made poorly and easily subject to damage. Thus the real benefit to the Bazaruto communities is limited. Similarly, Berger (1988) warned that poorly implemented social services tend to be underutilized due to a lack of a systematic extension program, with community involvement in the management and maintenance of these services. This is the case in the Bazaruto communities where installed infrastructure has failed; water pumps are no longer in use due to the lack of maintenance. The key elements of social infrastructure affected by tourism revenue were: education and schools, health, transport and water. Of these, schools, education, health and transport were identified as being particularly important to the people on Bazaruto Island. Water was less important (because hotel and BANP do provide it) but still addressed by the respondents.

Social infrastructure development, such as schools, a clinic and community houses are built with local materials, lacking in resistance to daily use and extreme weather conditions. Mirbabayev and Shagazatova (2002) indicated that local communities should benefit through tourism revenue contributions to improve social infrastructures. For example, traditional houses are replaced by modern buildings. But this is not the case in Bazaruto Island, where community infrastructure is still in a poor condition. As noted earlier, the WTO, UNEP (2005) and Simpson (no date) anticipated shops and transport to be among the social infrastructure emanating from tourism revenue. Again, this was not the case on Bazaruto Island, where the communities specifically raised transport as an example of social activities not yet generated by tourism revenue.
6.3.2 Education

One of the key discussions around the use of tourism revenue was about education. It was found that the Bazaruto Island communities had made education the first priority for tourism revenue use. Before the revenue was spent, they were aware of high levels of illiteracy (See Chapter 4), which they believed had a negative impact on getting jobs and on the relationship with the TYA committee. It was also linked to children leaving the island to find work. Tourism revenue was used to improve education in the form of supporting children to be sent to the mainland for higher education, as well as supporting the entire students in the island. The study noted an increase in the number of students at school generally and of girls in particular.

After spending tourism revenue on education, the community experienced its positive impact on the island children in terms of jobs and the potential for quality of life. Thus, the Bazaruto community members have changed attitudes towards education; they have realized that to improve livelihoods and living standards, education should be the priority when using tourist revenue funds. One outcome has been the willingness of the adults in the communities to participate in adult education. The Bazaruto Island community members are intent on investing most tourist revenue funds on education. In the short- to long-term this should contribute positively to future community change. The communities’ children can acquire knowledge and skills required for social and economic development of the communities and improved work opportunities; tourism revenue management is key to ensuring high levels of education.

These findings are consistent with the UNEP and WTO (2005) findings indicating that tourism revenue should be channeled by community members to education, training and capacity building. This is also consistent with the Mozambique government strategic plan for poverty alleviation as education is listed as one of the most important elements to be considered. While the Governo de Moçambique, resolução 8 (1995) places a priority on education, with a focus on rural areas, on Bazaruto Island, advances in education are occurring through community action using tourism revenue funds. The only role of the government has been to pay the salaries of the teachers.
6.3.3 Health

The community members were generally dissatisfied with the provision of health care. The one clinic on Bazaruto Island was established using tourism revenue. It was originally meant for maternity cases, but must now also handle general cases for all three communities, even though it is located far from Sitone and Pangaia. This motivated the communities to indicate that there should be a clinic in each of the three communities. This, according to the clinic nurse would help reduce the high mortality rate on the island (See Chapter 5). As with education, although, according to the Governo de Mocambique (1995), health infrastructure is a government responsibility, the respondents believe tourism revenue should be allocated for health care. This is consistent with findings in the Zimbabwe CAMPFIRE projects in Mahenye where community health services were improved through tourism revenue (ART, 2002).

6.3.4 Transport

A third pressing issue for the Bazaruto Island community members is the lack of transport. The respondents indicated a need for low-priced community transport. They link transport to commerce and the prices of basic household goods which tend to be very expensive because it is a tourist area. The study found no existing government policy addressing transport at this level. However, it has been the general belief that transport should also be provided, or at least addressed, by government. It was found that the Bazaruto Island community members have realized the transport problem can only be solved by their own actions. Although to date no tourism revenue has been used to improve transport to and from the island and mainland, the existing transport is from private people and from the hotels. The community indicated this would be a good use for tourism revenue for formal commerce and for transport.

Water presents another facet of the impact of tourism revenue on social infrastructure. Currently, water is not considered one of the major issues for the Bazaruto Island communities. Prior to the establishment of the hotels and the allocation of tourism revenue, water was a major concern. Tourism revenue was thus used to install water supply systems in all three communities. In addition to these, the hotels and BANP allow free access to their water systems.
Despite investment in community water systems, it was observed that most of the installed water pumps are no longer working and need rehabilitation. While the community is meant to be responsible for the maintenance of water pumps, they suggested government should be responsible for maintenance. They see it as one of the social benefits required for adequate livelihoods. Government policy (Governo de Moçambique, 1995) supports the view that the state should provide water to communities.

Two key points emerged from the discussion on social infrastructure. First, is that development in the area is limited because of generally poor infrastructure. There are no main roads, and houses and other buildings are generally in poor condition. The lack of main roads in Bazaruto Island dictates minimal development usually along main roads (Chambers, 1983). Second are the negative effects of revenue fund access and the corresponding sense of ownership and power. While previously government was perceived to be responsible for education, health and transport, it was shown that the Bazaruto Island communities have now taken ownership of these concerns. Access to tourism revenue funds have enabled communities to set priorities and act on these without state participation. As a counter indication of this, when water was not provided, the community took action. When it was later provided by external institutions, that is, hotels and BANP, the communities no longer feel ownership for the water systems, leaving them in a state of disrepair. IFAD (2009) warns of the need to ensure project sustainability by addressing the local involved community members; also, formulation of exit strategies ensure any positive project impacts can be sustained post implementation.

6.4 Field observations in the Bazaruto community area

During the interviews, the researcher also observed the area of study, as explained in Chapter 3. This was done to get an overview of daily community activities, such as fishing, agriculture, extraction of traditional wine from the palms, females collecting oysters and making mats and baskets using wild palms. It was observed that the agricultural methods are causing destruction to the environment through uncontrolled fires and the extraction of wine palms (Figure 10). The researcher was also able to observe that these communities are still living in poor conditions; they have limited incomes to improve livelihoods and infrastructure is poor. For example in
Sitone, only (2) two households have brick houses; in Zenguemelo, five (5) households have brick houses and Pangaia has no brick houses. The three communities also have limited access to terrestrial and marine natural resources, on which they mostly depend for survival. Additionally, the communities have limited access to basic services such as health and education facilities. There is only one clinic to serve all three communities and it is located in Zenguemelo. There are two school rooms from local materials in Sitone; three rooms in Zenguemelo and one in Pangaia.

Figure 15: Destruction of wild palm during traditional wine collection
Photo: by Ricardina Matusse

6.5 Impact of tourism revenue on conservation

The impact of tourism has four main themes: integrating community conservation and tourism; the indirect impact on conservation; the tension between conservation and daily living; and compensation for limited access to resources.

6.5.1 Integrating community, conservation and tourism

Protected areas are often associated with communities where livelihoods are directly linked to the resources of this protected area, whether these livelihoods result from subsistence or commercial activities. Protected areas are, by definition, areas for conservation and are usually
used for tourism. The communities associated with the park need to be involved in the management of the park and benefit from the tourism activities for the successful management of the protected area. They cannot be seen as ‘enemies’ of the park (Makombe, 1993).

The study has shown that Bazaruto communities fit Makombe’s description as they have been involved in BANP management; they have also made positive contributions to natural resource conservation in the park through, for example, community involvement in Community Based Natural Resource Management (CBNRM) programs. These programs became a key element of public education and involvement in BANP conservation (Chapter 5 section 5.2 & 5.5.1). The aim of community-based conservation is that local communities should receive tangible benefits from tourism. These benefits should not only be financial but also entail responsible natural resource use to enhance conservation and empower community members (Ashley, 1995). While community-based conservation cannot be seen as a solution to all of the problems faced by the communities, it does have the potential to bring economic, ecological and socio-cultural benefits to communities (Godde, 1998).

It is important to involve all key stakeholders in the management of natural resources as well as in public education for conservation (NACSO, 2006). This key stakeholder involvement together with external supportive agency in tourism planning can increase public awareness (Godde; 1998) Conversely, Shackley (1996) warns that lack of community development initiatives will lead local communities to participate in the destruction of natural resources, both marine and terrestrial. The success of tourism and conservation will depend on the involvement and participation of local communities both in strategic planning and management, and should develop perspectives valuing biodiversity conservation as an economic and social resource.

Therefore, local communities, BANP management, tourism operators, local government, influential parties, NGOs operating in the BANP, provincial level (DPT) and national level (MITUR-DNAC) should all be involved. The study shows that this is not currently the case.
6.5.2 Indirect impacts on conservation

The impact of tourism revenue on conservation is indirect. The communities have seen the advantages of tourism revenue and experience ownership and feel empowered as a collective. Community’s members become aware that tourism revenue can be sustained only when the park and its natural resources are conserved. It is now in their interest to ensure resources are conserved. This finding is consistent with a number of studies. Long (2002) argued that a community development approach can be fostered through Community Based Natural Resource Management (CBNRM) programs providing income benefits to local communities. These benefits will, in turn, lead to changes in community attitudes toward biodiversity conservation and sustainable natural resource use.

Tourism activities can be a source of environmental destruction if revenues do not benefit the local community members. Positive tourism impacts could reduce negative perceptions around conservation, wildlife protection, public awareness, educational programs and development initiatives (Makombe, 1993). Goodwin (1997) argued that protected areas have an important role in biodiversity conservation, through provision of tourism income for communities living in and surrounding those protected areas.

Tourism in BANP contributes to biodiversity conservation by providing revenue to the local communities, these community members then value and conserve natural resources as an income source. Globally, tourism can simultaneously be profitable, sustainable natural resource use by local community members living around protected areas, as well as provide community development and conservation (Ashley, 1995).

6.5.3 Tension between conservation and daily living

WES (2002) argues that communities need to understand the benefits and the value of tourism through practical training and capacity building to avoid unrealistic expectations among local communities; tourism benefits should turn aspirations into realities. Benefits can turn into significant reality if they are significant enough for all stakeholders. Archibald and Treves (2001)
stated that capacity building will provide local communities with a new understanding and management skills to conserve flora and fauna. Therefore, conservation education plays a positive role in discouraging wildlife poaching and environmental degradation. This appears to be the case in Bazaruto. The Bazaruto Island communities have demonstrated a good general awareness of the park and natural resource conservation; and of the community members benefitting from tourism revenue generated by natural resources.

Furthermore, it was evident that the positive BANP authority contribution in educating local communities about conservation has convinced local communities to use natural resources wisely. Communities are now able to identify species protected by the law; they understand the impact of uncontrolled fires and poaching; and they understand the need to practice agriculture sustainably to avoid environmental destruction. Most community members have adhered to park regulations, such as burning policy and sustainable use of marine and terrestrial resources. This result is similar to results found in India, where the practice of slash and burning agriculture and poaching have both been reduced and unused cargo boats have been replaced by house-boat operations (WES, 2002).

In addition to conserving natural resources, some of the Bazaruto communities are now starting to understand and implement management decisions regarding sustainable use of natural resources. An example is the implementation of resting periods by fishermen to allow fish stocks to recover and closure of certain oyster collection areas to enable oysters to grow sufficiently. There is, however a tension between conservation and the more short-term income generation. As a livelihoods strategy, the Bazaruto communities depend on the use of marine and terrestrial resources. Therefore, marine resources were ranked as the single most important resource for survival as it is a staple food and generates income, making it vulnerable to overexploitation. The problem is less a moral one, than it is a practical one driven by limited alternatives for community livelihoods.
6.5.4 Compensation for limited access to resources

Archibald and Traves (2001) argued that tourism revenue should be channeled to communities residing inside protected areas, for example, parks. They argue that by virtue of their location and the laws governing the protected area, they have limited access to park resources and should be compensated, as in the case of the Bazaruto Island communities. Due to the park regulations and policies, they have limited access to park resources, so BANP tourism revenue is meant to compensate communities for the loss of land use and resources.

An outgrowth of the limited access to resources is the drive by the Bazaruto communities to diversify livelihoods to include those not impacting on park conservation. They have initiated action to create and improve alternative livelihood strategies not relying exclusively on natural resources, thus removing pressures on the environment. Among these strategies are: boat-hire for transport, fishing and tourist trips; small-scale shops, barracas, for commercial purposes; and informal trading of basic necessities from the mainland, such as maize meal, rice, sugar, oil, illumination paraffin, clothing, beer and other goods.

Similarly, the BANP has implemented a number of CBNRM programs to assist communities in the adoption of alternative livelihood activities to reduce pressure on the marine and terrestrial resources within the park. Those programs are: beekeeping and honey production; sewing and embroidery training for six women; scholarships for pupils selected by the communities; carpentry and masonry skills training for six islanders in; the establishment of fishermen associations; and micro-finance for projects. Those projects have assisted communities to acquire valuable skills enabling community members to procure work in hotels and other organizations. Also, these projects have helped women to start businesses to generate small supplementary incomes, to reduce dependence on oyster collection and agricultural activities. It was observed that these projects were successful on two counts: some of the women who had received training are now employed in various ways; and those who started small businesses are continuing with those businesses. However, since the project have ended, there have been no new developments of this nature.
6.6 General conclusions

The study was launched to determine the social, economic and conservation impacts related to tourism revenue on the Bazaruto Island communities.

This study suggests that tourism revenue distribution to communities living in BANP has not yet resulted in substantial, tangible, positive impacts on the BANP communities. However, the study did document some positive impacts from tourism revenue distribution to the communities in the study area in each of the research themes: Socially, the main benefit was in education as there are more schools, classrooms and improved levels of education; Economically the identified benefit was micro-finance for projects for five local community members; loans used to finance projects have benefited the communities; and Conservation as communities have demonstrated the value they place on natural resource conservation. Broader conclusions were also formulated for each of these research themes.

6.6.1 Social impact of tourism revenue

Tourism revenue funds have been used for social development in the BANP communities. These include: education, infrastructure development, health care, transport and water supply. Education has seen some improvements. The majority of community’s ranked education as one of the priority benefits of tourism revenue because most of the funds are used for this purpose. Therefore, more effort is required to educate community children for future hotel and BANP employment.

In health care, there is no positive impact; there is more to be done. The communities indicated funds could be used to construct more clinics in the communities, one clinic per community, using conventional materials to weather annual cyclones, heavy rains and others climatic events. However, it is suggested that such an investment would be an understandable but inappropriate use of tourism revenue. As mentioned in section 5.3, government is responsible for providing basic social infrastructure. The communities should channel their tourism revenue share into
activities to more directly improve livelihoods. Thus the study found that while tourism revenue can have a positive social impact, this should not replace government responsibility.

6.6.2 Economic impact of tourism revenue

Tourism revenue was perceived to have had a minimal economic impact on the Bazaruto communities. Living conditions were not substantially improved as evidenced by continuing poverty and poor conditions in most homes. A key factor seems to be a lack of transparency and accountability in the use of funds from tourism revenue by the TYA.

Few positions had been created to benefit local community members, most positions have been taken by outsiders. Although some tourism revenue provided micro-finance for income-generating projects, only a few people have benefited from loans. Illiteracy is a key factor in both the lack of employment opportunities and an inability to appropriately manage funds, leading to a lack of transparency and accountability. A key discovery was that, since the government appears to have failed to deliver on basic social and economic infrastructure, revenue funds which might have been channeled to economic activities have instead been invested in basic infrastructure.

Tourism operators need to provide tangible benefits to local communities in terms of job opportunities. Based on community member perceptions, increased job opportunities will have a number of positive implications. More jobs will increase household income, diminish dependence on and overexploitation of marine resources and help in alleviating poverty. More jobs will also change community member attitudes to, and relationships with, the tourism operators so service standards will be impacted. Local communities are likely to increase workloads and work more effectively and this will create a more supportive environment for tourism activities. This opportunity has so far been missed by the Bazaruto Island communities.

6.6.3 Conservation impacts of tourism revenue

A positive contribution from communities in the conservation of both marine and terrestrial resources was revealed. The BANP authority seems to have communicated the natural resource
conservation message to the communities and the message seems to have been understood by the most community members. Uncontrolled fires and poaching have diminished; and marine resource resting periods established by the park authority are respected because it is understood that species prohibited by the law for hunting and fishing are necessary for conservation. There is also a good relationship between park and community members. It was also revealed that if tourism revenue is applied to creating alternative livelihoods in the communities, this could contribute to reducing pressure on the marine and terrestrial resources. That the communities still rely primarily on marine resources, fishing and oyster collection, and terrestrial resources, palm wine means that basic resource conservation will remain a key challenge.

There is a genuine tension between two concepts for Bazaruto Island community members. While a positive attitude toward conservation has been adopted and efforts made to implement conservation practices, livelihood choices are so limited, community members are often forced to abandon conservation in favor of survival. They are trapped between two impossible situations, neither of which is sustainable. This is, in part, linked to tourism revenue being channeled into basic social infrastructure instead of into livelihood activities.

6.7 Summary of Conclusions

In addition to determining the specific application of tourism revenue on the communities of Bazaruto Island, some more fundamental issues relevant to the potential for impact have been identified. In this section, some conclusions drawn from the findings around social, economic and conservation impacts will be discussed; then the broader issue of power will be explored. Finally, tourism revenue fund management will be discussed.

6.7.1 Potential impacts

Tourism revenue should have substantial, beneficial social, economic and conservation impacts on local communities living in and around protected areas. It should be possible to achieve the objectives of both development and conservation (Ashley, 1995). Further, tourism and the revenue derived therefrom, should deliver economic and social benefits through income-
generating initiatives to reach the most disadvantaged and poor communities. These community members have limited access to power and resource use in the surrounding protected areas, such as parks and reserves (UNEP and WTO, 2005). Makombe (1993) argued that for this outcome to be realized, the communities need to be involved in park management and tourism activities to benefit. He further argued that they cannot be seen as “enemies” (Makombe, 1993:22).

All of the conditions suggested in the literature to effect positive economic and social improvements were present on Bazaruto Island in the BANP. The communities are involved in: park and tourism revenue management; have taken ownership of the conservation message. They have utilized the tourism revenue according to community priorities to improve social infrastructure, to start a few businesses and to promote education. Generally, however, communities have not really seen any substantial improvement in lifestyle. They remain poor. They remain jobless. Their homes are still subject to weather damage. Their children still want to leave the island to seek employment.

The study suggests that there are two key factors that have limited progress on Bazaruto Island. One factor is social infrastructure, which has manifested in education and revenue fund use to improve social infrastructure. The community has clearly and rightly recognized the importance of education for all community members, children and adults, males and females. This public service is a government responsibility; however, these communities are effectively forced to provide education for them because government delivery is inadequate. This experience is repeated with regard to other public services, such as road, health and water services. This pressurizes communities to invest tourism revenue into public services, rather than activities to improve livelihoods and living conditions, such as home improvements and economic choices. Until this is resolved, it is suggested there cannot be any significant improvement for these communities from tourism revenue.

The second key factor is the practical tension between conservation and livelihoods. This tension exists partly due to tourism revenue use for social infrastructure, instead of livelihood expansion. It is also related to poor education and illiteracy, and poor transport and economic infrastructure resulting in limited options for community members. As long as the primary message of the park
is about conservation, there is no real effort to create alternative livelihoods; the Bazaruto Island community members will be paralyzed. It can be expected that conservation will ultimately be rejected in favor of basic survival.

### 6.7.2 Awakening a sense of power

It was shown that access to tourism revenue has given the Bazaruto Island communities a sense of power over their situation. They themselves have identified and taken specific actions to address real issues, a classic example of empowerment and ownership. It speaks to the inherent capacity of these communities to plan and act. It was also found that the community is empowered to reflect on consequences and to weigh these against intended outcomes, the essence of learning. Empowerment, ownership and learning are all essential elements of sustained development (Worth, 2006).

Unfortunately, they have had to use this power to address basic services, which should be provided by the government, thereby robbing them of investment opportunities and appropriate use of tourism revenue to more directly improve community member livelihoods, particularly in the short-term. There is too much dependence on marine and terrestrial resources; and there is too much dependence on hotel employment. These dependences can be overcome by using tourism revenue for economic activities. When communities are empowered and have ownership of concerns, they will act positively to improve the situation. For example, if water supplies are provided at no cost to the communities, they may relinquish that ownership in favor of easy solutions. Thus caution should be exercised when providing certain services.

This study has shown that poverty alleviation requires an integrated approach. While issues such as economic, social and conservation impacts can all be studied and addressed individually, the community sees these as part of a whole system impacting on social and economic wellbeing. These sub-systems must be addressed collectively as well as individually.
6.7.3 Managing tourism revenue

A key issue in the study was a general lack of clear guidance around tourism revenue management and use. Funds move from tourism operators to the BANP which simply transfers the funds, without any monitoring, to the TYA. Despite the intentions behind the policy, no one seems to have any real oversight or ownership of the whole program; and there seems to be no clear management and use guidelines for tourism revenue beyond ensuring the community receives a 20% share.

This arrangement is highly vulnerable to abuse when seen in the context of low literacy rates, a lack of any practical community management training the high level of distrust between the communities and the appointed fund management structure (TYA). This potential for abuse of funds has already been indicated by the communities with regard to inappropriate or ineffective revenue fund use, for example, the failed water system and investment in public services, such as clinics.

6.8 Limitations and weaknesses in the study

The study has been limited by some significant factors. As mentioned in Chapter 4, due to limited funds, time, and transport the study was conducted only on Bazaruto Island. Transport was a unique factor because to reach the other islands a boat was required, and none was available and land transport on Bazaruto Island was limited.

While every effort was made to gain respondent trust, it was evident from responses to specific sensitive questions, uncertainty and fear of repercussions on the part of the respondents may not have been fully overcome. For example, for the questions related to the transparency in tourism revenue use and how well the TYA committees worked with the communities, most of the answers were “I don’t know”. Such answers made it more difficult to confirm results from this aspect of the study.
Another limitation was that no previous research had been done in the impact of tourism revenue distribution in BANP. This was the first study to be undertaken in BANP and other protected areas in Mozambique, making it difficult to design the research in advance of the study. It also meant that there was no data to compare other findings from other studies.

At the time of designing the research, the researcher was unaware of the seasonality of activities, such as oyster collection. Due to the fixed time for the research, it was conducted during the oyster collection season, making it difficult to find individual respondents at home and interviews had to be conducted along the shore, making it difficult to secure the number of individual interviews desired and were mostly conducted in groups. In future studies, it would be better to establish a full seasonal calendar of activities to make it easier to conduct the interviews.

While the study was focused on tourism revenue impacts, the participants often presented issues beyond the scope and range of the study anticipating that the researcher might provide some solutions to pressing problems. This extended the time taken to complete the discussions and interviews. As mentioned by the communities during the interviews, apparently, community members participated in previous social research conducted on the island, but the effort did not result in any improvements. This limited the learning potential of this study.

Despite the above limitations and weaknesses, the study was able to render some findings and recommendations to assist the Bazaruto Island communities, BANP and the government of Mozambique. While the finding cannot be specifically generalized, the results do add to the growing body of knowledge informing policy and practice around tourism revenue for development and thus should be of value to other protected area communities using tourism revenue to improve community livelihoods. Additionally, the findings can be used as a source of guidance for further studies at BANP and at provincial and national levels.
6.9 Recommendations

Based on the results of this study, some recommendations for the management of tourism revenue distribution in communities living on Bazaruto Island have been identified. Also, these recommendations can be useful to assist other protected area particularly in Mozambique. One recommendation is aimed at the collective of stakeholders on Bazaruto Island. It is presented first and then followed by recommendations to government, the BANP, tourism operators and local communities.

6.9.1 Stakeholder’s involvement

The full involvement and participation of all key stakeholders, in the management of tourism revenue distribution by communities is a key factor for communities to benefit and develop. These key stakeholders include government at local, provincial and national levels, BANP management, tourism operators and local communities. This will assist the communities in wise, transparent and accountable revenue use. Monitoring and evaluation are fundamental to the success of community development. Furthermore, all stakeholders should collaborate to increase the number of tourism attractions available as this could also improve the quality of life in communities as well as on the entire Bazaruto Island.

6.9.2 Recommendations to government

Recommendations to government address social infrastructure, expansion of economic activities and tourism revenue.

- Social infrastructure

To ensure tourism revenue benefits local Bazaruto Island communities economically, socially and through community conservation, government should give immediate attention to the social infrastructure essential for any basic economic development. Local residents should not have to resolve such issues with tourism revenue use. This implies that the ministries of tourism, public works, health, education, transport and communication and social services need to develop and
implement a practical plan to co-ordinate the services on Bazaruto Island, to free the community members to use tourism revenue to improve their livelihoods. Specifically, clinics, schools, linkages to the mainland, and water supply need to be provided urgently and then maintained.

In addition to the integrated coordination of government services, special emphasis needs to be placed on education. This is a public service, Bazaruto Island community members should not have to use tourism revenue for this purpose. Educational developments should include more schools, classroom, teachers and resources.

- **Expansion of economic opportunities**

To address the persistent tension between conservation and survival, that is livelihoods, government should pay more attention to creating income-generating opportunities. These opportunities should include the establishment of economic infrastructure, with a focus on linkages to the mainland. Communities should not rely exclusively on hotel work opportunities, or solely on marine and terrestrial resources; should other employment be found. As a part of the economic development of the island, training in financial management and small business management is crucial, with a focus on tourism revenue fund management and use.

- **Tourism revenue**

Clear policies for the use of the 20% tourism revenue by communities living inside the protected areas should be observed. There should be a written guideline on how this revenue should be allocated according to the type of activities engaged in; the power could be delegated to the communities but only after collaboratively assessing community member needs.

The communities should not have to spend tourism revenue on basic infrastructure and services that are supposed to be provided by the government. The intention of the government in developing the parks was that they should, among other things, create jobs for the local residents. This has not happened largely because of the lack of educational services. Thus, for the government to achieve its own employment goals it needs to invest in education on the island as a matter of priority.
6.9.3 BANP management

BANP needs to review its policy regarding conservation messages to accommodate the tension between conservation and livelihoods. BANF need to be more proactive in helping the communities to solve the basic problems around creating a sustainable livelihood that does not rely on the park natural resources. It is insufficient for them to simply promote conservation in the absence of a realistic plan to develop alternative income-generating opportunities. They would need to work more closely with all the stakeholders in the economic and social development of the island, particularly at community level. The success of the conservation mission rests in the successful development of alternative livelihoods. As activities such as oyster gathering, fishing, and palm wine production are likely to remain important livelihoods, BANP needs to build greater capacity in the community in the wise natural resource use and not assume this will be handed down “father to son”.

The BANP should help to build capacity in the TYA and in the community in general to manage and use tourism revenue funds in an appropriately transparent manner. The community members should be involved in the overall process to provide backup support and advice, but should not take over the basic responsibility of fund management. The BANP should partner with the communities to identify and implement projects leading to income-generating activities.

6.9.4 Tourism operators

As with other stakeholders, tourism operators need to be more active partners in the integrated development of the island. Specifically, to overcome illiteracy and poor skills leading operators to hire outsiders, relevant skills and training for local community members should be provided by these operators. In a similar vein, they should revisit their remuneration policies to ensure employees are receiving fair wages.

Also in the spirit of partnership, tourism operators should be more closely attuned to the issues affecting the communities around them. They should also work to improve relationships between themselves and the communities. They should include the communities in the planning and
decision-making processes of tourism activities in BANP, rather than independently imposing inappropriate projects, such as the clinic, unable to be used because is too far from any of the communities.

6.9.5 Local communities

Communities should revisit their priorities regarding the use of tourism revenue funds. Rather than allocating these to public service projects, these funds should rather be channeled into diversifying livelihoods to include those not relying on park resources. To do this they will also need to make a stronger representation to government to ensure that it fulfills its mandate to provide basic social and economic infrastructure.

6.10 Recommendations for further research

This study covered only three communities associated with BANP. Further studies are necessary in the rest of the communities associated with BANP. Such studies will provide a clearer picture of the efficacy of the tourism revenue program on the three islands.

Research into the application of 20% tourism revenue on communities living around and inside other protected areas is needed. Such research will contribute to data required to understand of tourism revenue impacts and to improve program effectiveness.

More fundamentally, research should be conducted into the percentage of tourism revenue paid to communities. Throughout all this study, there was no clear foundation for this percentage.

This study, when analyzed against literature highlighted the need to take greater strides in ensuring sustainability of post-project implementation. A study should be conducted to determine the capacity of governmental and non-governmental institutions likely to be involved in development projects and programs on Bazaruto, or in any protected area. Similarly, to measure real change and sustainability, “baseline assessments of household livelihood security and resilience” should also be made (IFAD 2009:11).
This study did not look specifically at marine resource status. However, it was frequently mentioned that oysters and some species of fish seem to be declining. Research to verify these claims and to determine the cause if substantiated, would help in the management of marine resources and inform livelihood development initiatives. The study could be integrated with a more detailed study of livelihood systems used by the communities and BANP. This will assist communities to create diversified livelihoods to reduce pressure on marine and terrestrial resources.

In addition to the 20% tourism revenue program, general tourism activities appear to make a contribution to community development in BANP. Studies into the nature and extent of this contribution would be useful for overall planning and coordination of the tourism revenue program as well as development in general.
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Appendix A

Questionnaire for the respondents/communities

Field Form/Questionnaire
Team leader name: ............................................................................................

Introduction
This survey is intended to obtain information in the impact of tourism revenue distribution; economic social and conservation impact in Bazaruto Archipelago National Park (BANP). You are free to respond or not to respond to this questionnaire. Your name will not be published in the report unless you allow the research to do that. All your answers and personal details will be kept confidential. Your answers will help the researcher to make recommendations to government authorities to find better solution on the use of tourism revenue, how this revenue should benefit all communities, to improve communities’ livelihoods, so that individual households and all members of the community can benefit from the improvements that can be provided by the government. Furthermore, the researcher will appreciate your availability and willingness to help in providing useful information for her research.

General Information
Community name: ............................................................................................
Location: .............................................................................................................
Household name...............................................................................................

Gender
Male □ Female □ Marital status: .................................................................

Number of family members: .................................................................
Age □ Level of education achieved □

Occupation .................................................................................................

Level of income ...........................................................................................

Start time: --H – min

Date: ------/------/ 2009

Finish time: ---H ---mini

Part 2: Research Questions
1.0 Involvement in the Park
1) How long have you been living in BANP?
2) What is your opinion regarding the Park?
Is welcomed? Is helping to uplift our life, is good for conservation, job opportunity, I don’t like, I have no idea, others. ...........................................................
3) Have you or your family member have participated in BANP meetings?
If yes, how many times? When was the last meeting? ..................................................
If not, why?
Never been invited, we are not interested; the meetings are held far from our home, I don’t know............................................................................................................
4) What was the topic discussed in the last meeting?
Importance of the park, tourism, conservation of marine and terrestrial resources, the community benefits from tourism activities, 20% of tourism revenue, uncontrolled fires, others.............................................................................................................
5) Do you benefit from BANP?
If yes; which kind of benefit do you get from BANP
Tourism; employment; education; infrastructure development (schools, dispensaries, roads); access to natural resources; poverty reduction and others........................................................
If not, why?
We have not seen any benefit, the revenue from tourism benefits only few people; I don’t know; others
6) Do you know about the 20% of tourism revenue that goes to the communities?
If yes; from whom..........................................................................................................
If not, why? Give reasons.............................................................................................
7) Are you informed about the amount that goe s to the community?
If yes, which channels of communication are being used? ..................................................
If not, why? Give reasons
Who normally decide on the use of the funds from tourism to communities? .................
8) Are you happy with the amount that you are getting from tourism revenue?
If yes, why? ................................................................................................................
If not, give your opinion................................................................................................
9) What is your opinion in the application of these revenue?
All community members are benefiting?
If not, why? ................................................................................................................
If yes, how? ................................................................................................................
10) Does community participate in the management of the Park?
If yes, how? ................................................................................................................
If not, why? And how do you think they should participle...........................................
11) Have you heard about Tsomba Yedho Association (TYA)?
If yes, what is there function/objectives? ........................................................................
12) When was these TYA formed? ............................................................................
Is the TYA working with the community?
If yes, how? ................................................................................................................
If not, why? Give your opinion......................................................................................
13) Are you happy with TYA members?
If yes, give reasons......................................................................................................
If not, what should be done? .........................................................................................
2.0 About Tourism
14) How many lodges do you have inside the BANP? ................................................................
15) Are you getting any benefit from those lodges?
If yes, what kind of benefits? ............................................................................................................
If not, why? ........................................................................................................................................
16) What is the relationship between community and tourism operator?
Good........., bad............., no relation..............................................................
If is bad; why? And how to improve these relations? ........................................................................
If is good. Give reasons.........................................................................................................................
17) Are you happy to see tourists coming to the Park?
If yes, why? .................................................................................................................................
If not, give reasons............................................................................................................................... 

3.0 About Natural resources
18) What kind of resources are you getting from the BANP? Marine and terrestrial
19) What is the importance of conserving those resources?
20) Are you allowed to use those resources? Marine and terrestrial
If yes, by whom and how....................................................................................................................
21) Before the establishment of the park, who use to control the natural resources in the BANP?
22) Are you happy with the current control and use over natural resources? Why do you think this is a problem for you?
If yes, why? ........................................................................................................................................
If not, why? .........................................................................................................................................
23) How do you like the management of natural resource to be?
24) What is your opinion concerning uncontrolled fires in BANP?
25) Who cause the fires? ....................................................................................................................
26) Why do they cause the fires?
27) Do you know the impact that the fire cause in the environment? ............................................
28) Do people do poaching or other prohibited activities in BANP?
If yes, give reasons
If not, give reasons
29) Do you have public education concerning biodiversity conservation?
Yes: .......
No: ......
30) If yes! Who provide this education; are you happy? Do people change their mind toward conservation?
31) If not! Why? And what is your opinion?
32) Suggest us the most reliable and effective ways /methods/ procedures/ indigenous practices for natural resources clearing in the park that can be adopted to prevent and solve this problem?.................................................................................................................................

Livelihoods
33) What is your primary source of your livelihoods?
34) Do you think the Park has helped the community to develop their livelihoods?
   Yes …………………………………………….. 
   No …………………………………………….. 
   If yes, in which way? ………………………………………………………………………………………….. 
   If not, how would you like the park to do for community development? ………………………………
35) Are you willing to contribute for the protection and conservation of marine and terrestrial resources?
   Yes? ............
   No? ……. 
36) If yes! Explain how you can make your contribution
   If not! Explain why you cannot make your contribution

Thank you very much for your time and cooperation!
Appendix B

Guideline for Unstructured Interviews for Bazaruto and Indigo Bay hotels

This interview is meant for gathering information about tourism revenue distribution in BZN Park. In the interview, you are kindly requested to provide your real feeling about the economic, social and conservation impact of tourism revenue distribution on communities living in BANP.

General information about the respondents

<table>
<thead>
<tr>
<th>Name of the lodge:</th>
<th>Occupation:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of the respondent:</td>
<td>Ed. Status:</td>
</tr>
<tr>
<td>Age:</td>
<td>Date of Interview:</td>
</tr>
<tr>
<td>Gender:</td>
<td>Checked by:</td>
</tr>
</tbody>
</table>

1- What is your relationship with BANP authority?  
Good, Bad, no relationship………
Give reason for each of the answer…………………………………………………..

2- Do you think the Park is managed well?  
If yes how?  
If not, why?

3- Do you feel as stakeholder in the park management?  
If yes, how?  
If not, why?  
Are you involved in the Park management?  
If yes, how  
If not, why? And give your opinion on how should be involved in Park management

4- What is your relationship with communities living in BANP??  
Good, Bad, no relationship………  
Give reason for each of the answer…………………………………………………..

5- What benefits the communities are getting from tourism activities?

6- Do you think communities are happy with those benefits?  
If yes, how?  
If not, why? What do you think should be done in order to make them happy?

7- Are you involved in the use of tourism revenue that goes to community?  
If yes how?
If not, why?

8- What channel do you use to transfer the funds to the community?
9- Do you think is the channel useful?
   If yes, why?
   If not, what should be done?

10- When the communities started to receive tourism revenue?

11- Since that time up to date, is there any improvement on local community’s livelihoods?
   If yes. How
   If not, why? Give your opinion, what should be done

12- Give as much as possible information on the subject matter, so as to reach our goals…..

Thank you
Appendix C

Guideline for Unstructured Interviews for BANP staff

This interview is meant for gathering information about tourism revenue distribution in BZNP. In the interview, you are kindly requested to provide your real feeling about the economic, social and conservation impact of tourism revenue distribution on communities living in BANP.

General information about the respondents

<table>
<thead>
<tr>
<th>Name of the park</th>
<th>Occupation:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of the respondent</td>
<td>Ed. Status:</td>
</tr>
<tr>
<td>Age:</td>
<td>Date of Interview:</td>
</tr>
<tr>
<td>Gender:</td>
<td>Checked by:</td>
</tr>
</tbody>
</table>

1- What is your relationship with the communities living in BANP?
   Good, Bad, no relationship……..
   Give reason for each of the answer………………………………………………..

2- Do you think communities are getting benefits from the Park?
   If yes, which benefit?
   If not, why?

3- Do you think communities are informed about the amount that a getting from tourism revenue?
   If yes, how?
   If not, why?

4- Are they involved in the use of these funds?
   If yes, how
   If not, why? And give your opinion on how they should be involved

5- Are they involved in the park management?
   If yes, how?
   If not, why?
   Give reason for each of the answer………………………………………………..

6- When the Tsomba Yedlho Association was formed? What is their function?

7- Do you think are doing good job, toward the objectives that were formed for?
   If yes, how?
   If not, why? What should be done?

8- Do you think the communities are happy with the association?
If yes why?
If not, why?
9- Is there transparency in the use of the funds by the association?

10- Who normally make decision on the use of the funds?

11- When the communities started to receive tourism revenue?

12- Since that time up to date, is there any improvement on local community’s livelihoods?
If yes. How
If not, why? Give your opinion, what should be done
Are you involved in the application of the funds?
Do you think communities are able to manage the funds themselves without any help?
Are the communities aware on the sustainable use of marine and terrestrial resources?
Which channel are you using to make them aware?
Do you think they have changed their attitude toward conservation?
Have they stopped or reduced poaching? Uncontrolled fires? Unsustainable resource use, (marine and terrestrial)?

13- Give more information on the subject matter, so as to reach our goals…..

Thank you
Appendix D

Table 15: Illustrating the number and percentage of respondent from the questionnaire in the use of natural resources (NR) before the BANP was established

<table>
<thead>
<tr>
<th>Q21: Who controlled NR before</th>
<th>Sitone</th>
<th>Zenguelemo</th>
<th>Pangaia</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government</td>
<td>8</td>
<td>28</td>
<td>4</td>
<td>40</td>
</tr>
<tr>
<td>Local authority</td>
<td>0</td>
<td>0</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>No control</td>
<td>15</td>
<td>2</td>
<td>5</td>
<td>13</td>
</tr>
<tr>
<td>I don’t know</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>27</td>
<td>30</td>
<td>20</td>
<td>77</td>
</tr>
</tbody>
</table>

Table 16: Number and percentage of respondents in the benefit from tourism revenue

<table>
<thead>
<tr>
<th>Q6: Benefit from 20% policy</th>
<th>Sitone</th>
<th>Zenguelemo</th>
<th>Pangaia</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>11</td>
<td>8</td>
<td>12</td>
<td>31</td>
</tr>
<tr>
<td>No</td>
<td>16</td>
<td>22</td>
<td>8</td>
<td>46</td>
</tr>
<tr>
<td>Total</td>
<td>27</td>
<td>30</td>
<td>20</td>
<td>77</td>
</tr>
</tbody>
</table>

Table 17: Number and Percentage of respondents in the benefit from employment in the two lodges

<table>
<thead>
<tr>
<th>Q15 Employment at Lodges</th>
<th>Sitone</th>
<th>Zenguelemo</th>
<th>Pangaia</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>9</td>
<td>16</td>
<td>17</td>
<td>42</td>
</tr>
<tr>
<td>No</td>
<td>18</td>
<td>14</td>
<td>3</td>
<td>35</td>
</tr>
<tr>
<td>Total</td>
<td>27</td>
<td>30</td>
<td>20</td>
<td>77</td>
</tr>
</tbody>
</table>

Table 18: Number and percentage of the respondents in the level of education in Bazaruto Island

<table>
<thead>
<tr>
<th>Level of Education</th>
<th>Sitone</th>
<th>Zenguelemo</th>
<th>Pangaia</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>15</td>
<td>18</td>
<td>13</td>
<td>46</td>
</tr>
<tr>
<td>Secondary</td>
<td>3</td>
<td>6</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>University</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>No education</td>
<td>9</td>
<td>6</td>
<td>4</td>
<td>19</td>
</tr>
<tr>
<td>Total</td>
<td>27</td>
<td>30</td>
<td>20</td>
<td>77</td>
</tr>
</tbody>
</table>
Appendix E

Figure 16: Training of women in Sewing and embroidery

Figure 17: community member of BANP making Mats using the natural resources (Palm)