

**MANAGEMENT STRATEGIES FOR OUTDOOR RECREATION
RESOURCES AROUND THE MAPHELANE NATURE RESERVE:
A PERCEPTION STUDY**

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DECLARATION

I declare that this research study entitled: *Management Strategies for Outdoor Recreation Resources Around the Maphelane Nature Reserve: Perception Study*, except where specifically indicated to the contrary in the text, is my own work both in conception and execution. All the sources that have been used or quoted have been duly acknowledged by means of complete references. It is further declared that this dissertation has not previously been submitted to any institution for degree purposes.

By

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30 November 2010

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DEDICATION

This dissertation entitled: *Management Strategies for Outdoor Recreation Resources Around the Maphelane Nature Reserve: Perception Study*, is completely dedicated to my parents, Mr. F.M Makhubu and Mrs. J.S Makhubu for having evoked the love of education in me. Furthermore, dedications are due to my son, Sizwe and his wife Gugu for their love and support during the course of this research study. Their support and memory thereof, would always be with me during the entire period of investigation of this study. Finally, I would like to acknowledge the love, support and encouragement of Mr. P.M Mkhwanazi who made a big difference, not least during all the hours of fun and enjoyment when I was not writing this dissertation, but also during the technical preparation of this document.

ABSTRACT

Environmental protection and the conservation of the natural resources gained great impetus in the 1990s after the introduction of the concept of sustainable development by the integration of economic, social and environmental considerations into development activities (Lim & McAleer, 2004:1). Recreation and tourism development, as economic activities, are no exception to this process, and invariably would exert some impacts on the natural recreation resources of any tourism destination (Lim & McAleer, 2004:1).

In South Africa, the development of legislative frameworks associated with the environment, recreation and tourism have ushered in a new awareness, conception and interpretation of these fields of interest (DEAT, 1996; DEAT, 1997). Furthermore, the management of natural resources or outdoor recreation facilities in the context of responsible and sustainable tourism have been highlighted in recent studies (DEAT, 2000, 2002; Spenceley *et al.* 2002; Spenceley, 2003; DEAT, 2006). In the context of the principles cited above, this research study seeks to investigate the management strategies in place towards promoting outdoor recreation resources in the Maphelane environment also called Maphelane-KwaMbonambi. The ultimate goal in this study is to emphasise the conservation of the natural resources and environmental services and products, as a pre-condition for optimal socio-economic development, and thereby promoting sustainable development (Neto, 2003: 212).

The main purpose of this study is to provide valuable information about the natural resources and how these are perceived by the local community. In trying to meet these goals the following objectives have been formulated:

- (a) To find out the extent to which the Maphelane community understands the meaning and importance of outdoor recreation resources.
- (b) To establish the types of outdoor recreation facilities and services which are existing and available in the study area.
- (c) To reveal the participation patterns of the respondents in outdoor recreation facilities and activities in the study area.
- (d) To identify the outdoor recreation management practices that are carried out in the study area.
- (e) To ascertain the outdoor recreation benefits that are available for the community as well as community beneficitation.

The support of these objectives would suggest that the community of Maphelane knows and understands the value of the outdoor recreation resources, as well as appreciate the participation, management and benefits associated with the recreation resources.

The research methodology used in the analysis of the data involved usage of a stratified sample size of 127 respondents, who were categorised in the Maphelane-KwaMbonambi area as follows: outdoor recreation officials [12], tourists [19], tour operators [15] and local community [81]. Data were analysed using the statistical package for the social sciences [SPSS] programme, available at the University of Zululand.

The findings of the study revealed that there was a positive perception towards understanding the the meaning and importance of outdoor recreation resources. The community indicated that they participated to a less extent in outdoor recreation facilities than the tourists in the study area. The findings also indicated that recreation facilities and activities were inadequately provided and unsatisfactorily managed. The outdoor recreation management practices in the study area were found to be ineffective and inadequate for encouraging community beneficitation.

It was further discovered that, notwithstanding that the local community was aware of outdoor recreation activities and facilities in the study area, there were indirect benefits for the local community. The community members tend to be sceptical, where there are no identifiable and observable improvements in their lifestyle.

Finally, the study has offered some recommendations, mainly pertaining to the formulation of policies and strategies that seek to introduce the understanding of a conservation-based ecotourism. Some of these recommendations include: the authorities of the Maphelane-KwaMbonambi area, improving the delivery of outdoor recreation facilities; the established of a strategy for the inculcation of the respect and love for conservation in the area; encouragement of more community participation in outdoor recreation activities; improvement of accessibility of various stakeholders to recreation facilities; and initiating a range of skills development and training programmes related to outdoor recreation facilities, activities and practices in the study area.

ACCRONYMS AND ABBREVIATIONS

TERM	DEFINATION
CEP	Cumulative Environment Assessment
DEAT	Department of environmental Affairs and Tourism
EIA	Environmental Impact Assessment
EMS	Environmental Management System
EMP	Environmental Management Plan
IDP	Integrated Development Planning
IEM	Integrated Environmental Management
KZN	KwaZulu-Natal
KLM	KwaMbonambi Local Municipality
KZNW	KwaZulu-Natal Wildlife
LAC	Limited Acceptance Capacity
MNR	Maphelane Nature Reserve
MLM	Mtubatuba Local Municipality
NCS	Nature Conservation Service
NEMA	National Environmental Management Act
SEA	Strategic Environmental Assessment
SoE	State of Environment
SoER	State of the Environment Report
SDF	Spatial Development Framework
SPSS	Statistical Package for the Social Sciences
MDM	uMkhanyakude District Municipality
VERP	Visitor experience of Resource Protection
VIM	Visitor Impact Management
WCU	World Conservation Union
WTO	World Tourism Organization
WWF	World Wildlife Funds

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CHAPTER 1

ORIENTATION TO THE STUDY

1.1 INTRODUCTION

The natural environment also known as outdoor recreation resources or simply natural resources represents a different phenomenon to different people, communities and individuals. Owing to its immeasurable value, the environment needs to be conserved and preserved in as good a manner as possible for the benefit of future generations (Patmore, 1983). It is from nature that all living things get their means to survive and flourish. The quality of the environment, in its totality, also provides a natural impetus for recreation and tourism. On the whole, outdoor recreationists and tourists are attracted by natural attributes such as mountains, beaches, rivers, estuaries and forests (Pigram, 1983).

At another level, outside the natural environment, there is the human environment which consists of artificial environmental features such as buildings, monuments and open parks, which also play a role in attracting recreationists and tourists (Dennis Moss & Partnership Inc., 2002; UIDP, 2002, 2008). Other factors such as the socio-cultural quality and traditional ways of life of the local community also provide much needed attraction (Ivanovic, 2008). The natural environment includes renewable and non-renewable natural resources such as air, water, land and all forms of life. Management strategies of natural environment should be implemented in the wider public arena. According to Bennett, *et al*, (2005), management of

natural environment determines how people perceive it differently since the image of such environment is based on motivational and perceived options.

Outdoor recreation resources found in the whole world are part and parcel of the natural environment. Their proper management not only ensures conservation, but also adds beauty and value to the natural scenery (Pigram, 1983). Furthermore, properly managed outdoor recreation resources play a significant role in attracting tourists thus serving as a source of income to local communities. It is against this background that this study attempts to investigate the management strategies of outdoor recreation resources found in the south-most tip of the famous Isimangaliso Wetland Parkone previously known as the Greater St. Lucia Wetland Park (GSLWP), a World Heritage Site in KwaZulu-Natal (Magi, 2006; Magi & Nzama, 2009a).

1.2 BACKGROUND TO THE PROBLEM

Environment protection and the conservation of the natural resources gained great impetus in the 1990s after the introduction of the concept of sustainable development by the integration of economic, social and environmental considerations into development activities (Lim & McAleer, 2004:1). Recreation and tourism development, as economic activities, are no exception to this process, and invariably would exert some impacts on the natural recreation resources of any tourism destination (Lim & McAleer, 2004:1).

In South Africa, the development of legislative frameworks associated with the environment, recreation and tourism have ushered in a new awareness, conception and interpretation of these fields of interest (DEAT, 1996; DEAT, 1997). Furthermore, the management of natural resources or outdoor

recreation facilities in the context of responsible and sustainable tourism have been highlighted in recent studies (DEAT, 2000, 2002; Spenceley *et al.* 2002; Spenceley, 2003; DEAT, 2006). In the context of the principles cited above, this research study seeks to investigate the management strategies in place towards promoting outdoor recreation resources in the Maphelane environment. The ultimate goal in this study is to emphasise the conservation of the natural resources and environmental services and products, as a pre-condition for optimal socio-economic development, and thereby promoting sustainable development (Neto, 2003: 212).

According to Kies (1982) and Schlemmer (1988) KwaZulu-Natal is one of those long standing and largely visited destinations in South Africa. This viewpoint is also maintained by the 2009 Sho't Left visitor-programme (SAT, 2009a). Maphelane Nature Reserve is one of the areas under the Isimangaliso Wetland Park located in the southern part of the Wetland. It is one of the protected nature reserve found in KwaZulu-Natal, and communities and tourists benefit a lot from this form of tourism. In emphasizing the importance of Maphelane and iSimangaliso Wetland Park as both an outdoor recreation resource and a world tourist destination, Dennis Moss Partnership (2002) have stated that the mission of this natural resource is to promote and manage sustainable tourism-based development that will stimulate regional economic growth while preserving the ecological and cultural integrity of the park. This kind of policy would enable South Africa to fulfil its commitments to the World Heritage Convention.

This study is, therefore, aimed at investigating whether the management strategies used in Maphelane Nature Reserve do take into consideration both the democratic principles as well as ecotourism principles, practices and policies for sustainability of outdoor recreation resources.

1.3 STATEMENT OF THE PROBLEM

The statement of the problem relating to this study can be wide far reaching, since the Maphalane Nature Reserve combined with the iSimangaliso Wetland Park is a massive natural area. The extended problem in the study area could be associated with the loss of biodiversity and conservation, the degradation of the life support system, global climate change and ozone layer destruction (Dennis Moss Partnership, 2002). These are some of the many biophysical problems that our world faces today. These life support systems of nature are part of broader ecological processes which need to be more clearly understood. In the Maphelane area the population increase could cause the loss of indigenous flora and fauna. Endangered and extinct wildlife results from human interference and greed which leads to excessive hunting of animals. Environmental degradation may also result in the destruction of the swamp forests, when they are invaded and thus killing many species of the natural vegetation (Douglass, 2000).

The secondly problem that may be raised is associated with development and improvement of social and economic conditions. In developed countries the high rate of economic growth has led to increased natural resource consumption. This, in turn, makes great demands on the world's natural resources. On the other hand, in underdeveloped countries such as Africa, unfair exploitation and inequality have contributed to the prevalent high levels of poverty and deprivation (Douglass, 2000). The Maphelane Nature Reserve is a rural area where people utilised natural resources for socio-economic benefits. The communities thus convert, mostly natural vegetation, into saleable curios and alter the scenery from what it naturally is. In some instances they hunt down wild animals for their skins from which they make traditional attire [<http://www.sa-venues.com/gamereserve/mapelane> (2010)].

Despite the increasing technological sophistication of world societies in terms of faster transport and more powerful computers, Africa is still plagued by social conflict and violence. Wars and other armed conflicts that take place in Africa have impacted adversely on the countries in Africa. Millions of people have been, and are still being, displaced and turned into refugees (Douglass, 2000). Maphelane does not have a history of faction fights, however, it is viewed as a place of refuge by some people migrating from conflict prone areas. This, in itself, further promotes the population growth experienced in the area (Personal Interview: Inkosi Mthiyane of Sokhulu)

Lastly, in many African countries basic human rights are denied. There is a high prevalence of government repression with many workers being exploited for political and economic gain. Oppressed people have often been forced to live on marginal lands, thus putting pressure on the biophysical environment. Similarly in the study area, the South African government resettled the local people from the east to the west of the local mountain. The aim was to conserve the rich natural resources in the eastern part of the mountain. This, however, resulted in the local population being displaced into marginal lands (Douglass, 2000).

In concluding this section, this research seeks to investigate the management strategies and practices that have been put in place to protect the natural environment as well as promote effective outdoor recreation usage in and around the Maphelane Nature Reserve. In other words this project is a perception study of the management of outdoor recreation resource in the study area. It also seeks to establish the extent to which local residents are aware of the dynamics of natural resource management. The study also aims at revealing the different view-points expressed by the local community

about the management of natural resources in as far as outdoor recreation and tourism are concerned.

1.4. DELIMITATION OF THE STUDY

According to Lubbe (2003) it is not easy to restrict the area of investigation when the state of management strategies for outdoor recreation resources is affected by extraneous matters. As a result, the demarcation for the study area has to be as precise as possible, particularly if it is a very large or small area. It is also important to identify all existing access routes to the study area. In order to cast light on the exact spatial area that this study is referring to, it was felt appropriate to start by looking at both the spatial and conceptual delimitation of the study.

1.4.1 Spatial Delimitation

In order to understand the analysis of the study area more effectively, the area was delimited geographically to the existing protected coastal forest, swamps, vegetated dunes, riverline vegetation and the marine areas of the Maphelane Nature Reserve, which is about 1129 hectares. Maphelane is made up of a sand-dune mountain, with more sand than rock. It is largely covered by bush and natural forest [http://www.kzntopbusiness.co.za/site/mbonambi. (2010)].

The Maphelane Nature Reserve consists of four camping and caravan sites, four-hutted accommodation, four points of basic supplies, four communal lounges and halls, four curio shops, four public telephones and four sky-boat launch sites. Some of the major facilities and activities include the following: boating facilities, fishing, picnicking, swimming (rivers, dams and

the sea) and walks and/or hikes (day and overnight). More of the facilities are described in some detail in chapter three.

As mentioned earlier, the study area is a small portion of the iSimangaliso Wetland Park with indigenous sand-dune forests which needs to be managed properly for both the present and future generations to benefit. Also the study area falls under those areas that are protected, therefore management of it must involve all stakeholders of Maphelane-KwaMbonambi area, and iSimangaliso Wetland Park Authority.

1.4.2 Conceptual Delimitation

In Maphelane the resource management system depends heavily on the type and degree of organisation within the system. These in turn are governed by the Maphelane-KwaMbonambi authorities. The organisation in turn, determine the efficiency of resource use, flexibility of resource management and the basic functioning of the overall resource management system [Zimmermann (1951) cited in Bradley (2004)]

In order to contextualise the study area and its management and administrative setup, it is important to understand that Maphelane is a natural phenomenon or resource in the form of a massive coastal sand dune, with a variety of natural attributes, such flora and fauna. Maphelane is under the administrative jurisdiction of the KwaMbonambi Local Municipality, and the KwaSokhulu rural area, which tribal area has its residents paying homage to the tribal authority of KwaMbonambi. An agreement exists that owing to the biodiversity and conservation character of Maphelane, the area has had to be put under the conservation control of iSimangaliso Wetland Park Authority. This authority takes responsibility for the conservation, recreation, tourism and related operational activities (KwaMbonambi IDP, 2007; Inkosi

Mthiyane, 2010; Truman Buthelezi, 2009; iSimangaliso Wetland Park Authority, 2009).

Resources are managed in order to satisfy human wants. According to Zimmermann (1951) as cited in Bradley (2004) the availability for human use, and not mere physical presence, is the chief criterion of resources. Thus not static, but they expand and contract in response to human wants and human actions [Zimmermann (1951) cited in Bradley (2004)]

As suggested by Zimmermann (1951) cited in Bradley (2004) there are various approaches used to manage resources, some of these include the following:

- (a) Integrated planning and management of land resources;
- (b) Integrated management of sustainable development of the coastal and marine areas, including exclusive economic zones;
- (c) Promoting sustainable human settlement development;
- (d) Merging environment and development in decision-making and
- (e) Establishing systems for integrated environmental management and auditing.

It was found that the Maphelane management also used the same approaches as mentioned above to manage outdoor recreation resources in the study area. The integrated environmental management and monitoring of the reserve is done on a day-to-day basis, towards protecting biodiversity.

1.5 OBJECTIVES OF THE STUDY

The overall aim of the study is to provide valuable information about the natural resources and how these are perceived by the local community for the long term beneficiation of its inhabitants. The other aim is whether there are

policies and strategies that facilitate the effective management of outdoor recreation resources in the study area. As such, in order to elucidate the intention of the study it is necessary to work out some objectives of the research study. In trying to meet these goals the following objectives have been formulated:

- (a) To find out the extent to which the Maphelane community understands the meaning and importance of outdoor recreation resources.
- (b) To establish the types of outdoor recreation facilities and services which are existing and available in the study area.
- (c) To reveal the participation patterns of the respondents in outdoor recreation facilities and activities in the study area.
- (d) To identify the outdoor recreation management practices that are carried out in the study area.
- (e) To ascertain the outdoor recreation benefits that are available for the community as well as community beneficiation.

The support of these objectives would suggest that the community of Maphelane knows and understands the value of the outdoor recreation resources, as well as appreciate the participation, management and benefits associated with the recreation resources.

1.6 HYPOTHESES OF THE STUDY

An hypothesis is defined by Wellman & Kruger (1999) as a tentative assumption or preliminary statement about the relationship between two or more phenomena that needs to be examined. In other words, the statement of hypothesis is an educated guess that is useful in mapping the direction of the study. It facilitates the analysis and interpretation of the subject matter under

discussion. In this study the following hypotheses relative to the objectives have been postulated:

- (a) That the Maphelane community fully understands the meaning and importance of outdoor recreation resources.
- (b) That the respondents are familiar with the types of outdoor recreation facilities and services which are existing and available in the study area.
- (c) That the participation patterns of the respondents in outdoor recreation facilities and activities are inadequate in the study area
- (d) That the outdoor recreation management practices that are carried out in the study area are well perceived by the respondents.
- (e) That there are sufficient benefits from outdoor recreation opportunities for the community in the study area.

It is worth noting that the research hypothesis utilised in five statements given above, is preferred rather than the statistical hypothesis. The research hypothesis, for this purpose is defined as the statement of what the researcher deems to be the most probable answer to the question posed in the problem of the study (Magi, 2007).

On the other hand, the statistical hypothesis is defined as the statement of no significant difference in measures of the dependent variable except what would be expected for sampling, was used to facilitate the outcomes of analysis. The statistical hypothesis uses the null hypothesis as a point of argument.

1.7 DEFINITION OF TERMS

For the purpose of this section, it is necessary to operationally define some of the concepts, so as to avoid their misinterpretation, and eliminate ambiguity

in their usage. A variety of definitions exists and has been used in a number of ways. The following section contains concepts or terms that are used to further provide meaning in relation to the study.

1.7.1 Recreation

According to Torkildsen (2005: 52) the most widespread definition, and the most acceptable to providers of leisure services, is that recreation is activities in which people participate during their leisure time; however that not any activity will do. Recreation needs to provide satisfaction in some way. On the other hand, Kelly (2000) believes that recreation is intended to restore us to wholeness, to health, for whatever purposes we may have. We do not recreate only to work, we also recreate as a form of restoration in our social situation.

In the above regard, recreation is wholesome activity that humans engage in for pleasure as well as other necessities of our daily life. Recreation revitalises the spirit, restores a person's vitality, initiative and perspective of life. According to Cooper, *et al.* (1996) recreation is not a matter of motions but rather of emotions. It is a person's response, a psychological reaction, an attitude, an approach, and a way of life. In concurrence, Gray & Graben (1974) have already established that recreation is an emotional condition within an individual human being that flows from a feeling of well-being and satisfaction. It is independent of activity, leisure or social acceptance.

For purposes of this research study, the generally accepted definition by Torkildsen (2005) is assumed to be the most appropriate in dealing with the management strategies and practices associated with recreation in the conservation and protection of the natural environment as well as promote

effective outdoor recreation usage in and around the Maphelane Nature Reserve. It is important to note that whilst the concept 'recreation' stems from the Latin word *recreatio*, which means, "to restore to health". It can also be developed to refer or be thought of as a process that restores or re-creates the individual (Torkildsen, 1995). On the one hand, Torkildsen (2005) defines recreation as an activity relates to engaging in voluntary activity for the satisfaction derived from that activity itself, and leading to the revitalization of mind, body and spirit. In the context of this study, this concept is used to emphasise that people should use their leisure time for engaging themselves in any type of recreation activity, for purposes of achieving the above-mentioned outcome.

On the other hand, Magi (1999: 148) defines recreation as "engagement in any activity with an intention of achieving pleasure and personal worth". He has further argued that recreation is not necessarily dependent on the availability of free time, but also on obligated time (Magi & Nzama, 2002). A further argument is that, in most cases, a recreator might not voluntarily participate and enjoy satisfaction but it is in later stage that such pleasure is attained. Recreation means an enjoyable leisure activity or an activity of recreating, an emotional condition, a social institution, a means for restoring our energies for work or voluntarily chosen experience within one's leisure.

1.7.2 Outdoor Recreation

This concept of outdoor recreation does not only refer to recreation activities, but more specifically relates to recreation activities taking place in the natural environment (Brockman & Merriam, 1971). In some instances the term "natural recreation" is used synonymously with the term outdoor recreation. For the purpose of this study the term outdoor recreation is used to include

natural areas, as well as some areas that have been modified by man but remain nature-based.

According to McCall & McCall (1977) the terms outdoor recreation and nature-based recreation have often been used synonymously to denote recreation activities which take place in a natural setting. In another context outdoor recreation relates to activities engaged in either individually or collectively in the natural environment, to achieve 'pleasurable' experience, which is having its own immediate appeal, and not impelled by a delayed reward beyond itself (Torkildsen, 2004).

A definition which attempts to give a more specific explanation of outdoor recreation is that of Kraus (1978) cited in Magi and Nzama (2002: 4) which states that:

It should consist of those recreational activities that can best be carried on out of doors, and which have in some way a direct relationship or dependence on nature, or that place the participants are in direct contact with the natural elements.

For the purpose of this study the term outdoor recreation is used to include natural areas, as well as some areas that have been modified by man and constructed.

1.7.3 Resources

Resources are the building blocks of development. Through a process of appropriate development, natural or cultural resources are converted into attractions for the use of recreators, tourists and others. In order to get a clearer and unambiguous understanding of the concept 'resource' used in this study, it is important to see it as referring to either nature-based, man-made

materials or a combination of both, constructed to benefit humankind in the improvement of quality of life.

Resources are also seen as constituting two types: renewable and non-renewable. Renewable coastal resources are natural and human-produced goods and services that are either dependent on the coast for their existence or whose value is considerably enhanced by their location at the coast. Non-renewable resources, on the other hand, are not generated or reformed in nature at rates equivalent to the rate at which they are used, *e.g.* petroleum (Dennis Moss & Partnership Inc, 2002).

1.7.4 Nature Reserve

The definition of what has been designated as nature reserve, also called ‘protected area’ is concept that has been adopted by International Union for the Conservation of Nature and Natural Resources (IUCN, 2000: 22) 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. Although all protected areas meet the general purposes contained in this definition, in practice the precise purposes for which protected areas are managed differ greatly. (IUCN, 2000; 22).

The IUCN (2000) also defines nature reserve as a natural area of land and/or sea, designated to (a) protect the ecological integrity of one or more ecosystems for present and future generations, (b) exclude exploitation or occupation inimical to the purposes of designation of the area, and (c) provide a foundation for spiritual, scientific, educational, recreational and

visitor opportunities, all of which must be environmentally and culturally compatible.

In the context of this study the nature reserve is used to refer to the Maphelana Nature Reserve as typical natural environment, which under the administrative jurisdiction of the iSimangaliso Wetland Park Authority, as well as the legislative control and ownership of the KwaMbonambi Local Municipality. The Maphelana Nature Reserve's land regime is designated to protect the ecological integrity of ecosystems for the benefit and enjoyment of visitors, locals and outside people.

1.7.5 Natural Environment

The term natural environment also relates to the nature reserve, protected area, as well as outdoor recreation environment, and may mean different things to different people. The South African White Paper on Environmental Management Policy (DEAT, 2005), states that the term refers to conditions and influences under which any individual or thing exists, lives or develop.

In the context of this study the word environment refers to the natural resources that exist in the study area. These conditions and influences include the following:

- (a) The natural environment made up of renewable and non-renewable natural resources such as air, water, land and all forms of life,
- (b) The social, political, cultural, economic and other factors that determine and influence people's places and how they influence natural environment they occupy,

- (c) Natural and constructed spatial surroundings, including urban and rural landscapes as well as places of cultural significance, ecosystems and qualities that contribute to the lives of communities.

1.7.6 Community

According to Bellah, *et al*, (1985) and the World Book Encyclopaedia, (1996) the concept ‘community’ refers to a group of people who share similar beliefs and customs and who may live in the same area of spatial environment. A community is also seen as a group of people who are socially interdependent, who participate together in discussion and decision-making, and who share certain practices that both define the community and are nurtured by it. The emotional bonds link community members together, so that they share a sense of belonging and feel an obligation towards other members of the group.

Similar to the above definitions, Stoddard (1993) also sees the concept ‘community’ as referring to a social organisation on the basis of: (a) shared values and beliefs by the individuals; (b) direct and many-sided relations between individuals, and (c) on the practice of reciprocity. Communal groups have been observed to distinguish themselves by presenting, meaning and a sense of self-worth to their members while providing a manageable scale through which to manage day-to-day affairs (Hall & Lew 1998).

On the other hand Murray, *et al* (1994), see the community as referring to the idea that there is something common to a group or section of population. As mentioned earlier, it may be based on geographical areas or localities ranging in size from a single street through estates, neighbourhoods, and wards, other smaller administrative areas such as school, catchment areas and parishes, villages, towns, districts, counties to nations and even groups of nations. In

this study community more specifically refers to the local people who are tied together by the Maphelane Nature Reserve as the main resource giving sustenance to the local community.

1.7.7 Perception

The phrase 'a perception study' refers to individual or group awareness of the processes associated with understanding the characteristics of the nature reserve or natural environment. It includes feelings and reasoning about complex natural and cultural characteristics of this particular area. In other words, this process is one of receiving, organising, and assigning meaning to information or stimuli detected by the five basic human senses, *viz* sight, touch, taste, smell and hearing (Magi, 1992a). In addition, it must be noted that the words cognition and perception can be associated to mean one and the same thing, if they are not well defined. Nonetheless, according to Magi (1986) the concept 'cognition' is a general term that includes both the various sensations of seeing, feeling, hearing, touching and smelling and also the interpretation of these in the light of previous experience. For the purposes of the study, perception will mean the opinion and attitudes of the local community shaped by past and present experience with regard to management strategies for outdoor recreation resources.

1.7.8 Management

According to Theodorson & Theodorson (1970) the term management refers to the process of planning, organising, co-ordinating and directing the productive process in an economic enterprise and other processes of decision-making. Similarly, Evans, *et al.* (2003), argue that management has evolved from earliest practices, principles and research that provide a body of scientific knowledge about organisations and the way they function. This scientific knowledge deals with (a) management framework which includes

corporate strategy, resource analysis and management structure; (b) management system is a methodical structuring and processing of planning and day-to-day practices in an enterprise or a section within an enterprise; (c) management activities which include estate or site plans, woodland plans, visitor management plans and daily management procedures (Evans, *et al.* 2003).

In this study the term management refers to a totality of actions that include planning, organizing, directing and controlling processes aimed at the optimal conservation of natural resources in the study area. In other circumstances management can also refer to the implementation which is aimed at carrying out public policy.

1.7.9 Conservation

In this context the management of human use of the biosphere to yield the greatest benefit to present generations while maintaining the potential to and aspiration of future generations can be known as conservation. According to Dennis Moss Partnership Inc, (2002) conservation thus includes sustainable use, protection, maintenance, rehabilitation and restoration of the natural environment.

1.7.10 Policy / Strategy

The concept of 'policy' relates to a planned or agreed upon course of action usually based on particular principles, for example, the government's policies on environmental management (Hall, 2000; Lubbe 2003). In relation to the environment, Hall (2000) sees policy in relation to governmental processes, that is, in terms of the consequence of the political environment, values and ideologies, the distribution of power, institutional frameworks, and of

decision-making processes. In other words, Craythorne (1990: 59) avers that “policies are concerned with events to take place in the future arising from or based on the events in the present or past”.

Accordingly, a more comprehensive definition of tourism policy or tourism strategy, for purposes of this research is that it is the “course of action guiding principle, or procedure considered to be expedient or advantageous in the planning and management of recreation and tourism” (Hall, 2000: 8). Both policy and strategy have to be seen as a consequence of the political environment, values and ideologies, the distribution of power, institutional frameworks, and of decision-making processes. Policy and strategy highlighted in this study relates to how conservation management can facilitate outdoor recreation execution in and around the Maphelane Nature Reserve.

Finally, Lubbe (2003) defines policy, this also may include strategy, as a set of guidelines generally accepted by all and used to improve and facilitate decision making and appropriate action under certain circumstances. The policy and strategy highlighted in this study relates to how management can facilitate community recreation participation in the Maphelane Nature Reserve and KwaMbonambi Local Municipality [Maphelane-KwaMbonambi]

1.7.11 Previously disadvantaged communities

As mentioned earlier, the concept or term “community” suggests an existence of coherence among the people with a common experience or destiny Bellah *et al.* (1985: 313). In the context of the above definition a previously disadvantage community [PDC] is one which has been integrated and thus become socially interdependent, because of the policy of *apartheid* in South Africa, This term is typically South African and related to those individuals

who have been discriminated against through the apartheid policies of the pre-1994 South African Government.

In an attempt to reverse the negative effect of the apartheid policy and the notion of previously disadvantaged communities, the South African authorities have attempted to refine outdoor recreation to be more beneficial and improve the quality of life of the previously disadvantaged individuals (PDIs). As such the state sought to create opportunities of economic development, poverty alleviation and community participation through setting up outdoor recreation policies and strategies, seeking to achieve transformation, growth, employment and redistribution, as well as economic empowerment of the PDCs (DEAT, 1997, 1998; DTI, 2004a; Rogerson & Visser, 2004). Finally, it is important to state that this research study attempts to establish what actions the PDCs are involved in as a way of concretising the execution of policy in the study area. This research has not stopped with the establishment of policies, but further sought to gauge the extent to which policies were being translated into tangible things that people could identify and accept.

1.7.12 Tourism

The term 'tourism' in this context refers to the activities of individuals travelling to, and staying in, a place outside their usual environment for not more than one year in succession for leisure, recreation activity, business and other purposes (Magi, 2006). Accordingly, Smith (1989) defines tourism as a resource that has potential to bring in money for other regions with minimal environmental impact. This study, while accepting these definitions, focuses on travelling and visiting nature-based areas, such as game reserves, natural parks and environments.

1.8 SIGNIFICANCE OF THE STUDY

Several concepts have been identified as having largely negative impacts on biodiversity. These concepts affect access to and the quality of footpaths in the forest (Hall, 2000). The significance of this study is to determine how to ameliorate some of these impediments:

- (a) Habitat loss and damage through informal widening of paths, creation of desire lines and new paths as well as soil damage including erosion and compaction.
- (b) Damage made to natural areas by visitors and community leaving formal routes.
- (c) Late identification of problems leading to high maintenance cost of paths and access points.
- (d) Animals and birds being snared and trapped by people for various reasons.
- (e) Fishing of mussel and crayfish and use of illegal gill netting.

It was anticipated that this study would address some of the impediments listed above, and more particularly, those that are typical to the study area, and involve socio-economic, cultural and political elements. It was anticipated that the research study would also help to establish the level of recreation understanding and awareness among the people of Maphelane-KwaMbonambi and related stakeholders. Understandably, this achievement would lead to better community understanding and participation in the management of outdoor recreation resources.

1.9 METHODOLOGY

This section presents the detailed explanation of methods, research design and procedures followed in carrying out the study and research instruments used for collection of data for this research. According to Macmillan & Schumacher (2001: 52), in the methodology, the researcher indicates the research design, subjects, instruments, and procedures used in the study.

1.9.1 Research design

According to Borg & Gall (1996: 321) research design is the specification of all the procedures selected by the researcher for studying a particular problem or set of questions or hypothesis. The method of research employed in this investigation includes the delineation of the study area, delimitation of the sample and size and the techniques for gathering and analysing data. The collection of data was achieved by self-administered questionnaires and conducting person-to-person interviews. Users of outdoor recreation facility were interviewed on site covering all the stakeholders, particularly the tourists patronizing the natural resources as well as the host community which was interviewed by randomly selecting individuals in the Maphelane Area.

1.9.2 Research sample

According to Magi (2007) the total population of respondents within the study area can be determined from the total population of local municipal area. The selection of a suitable size of sample [127] from a population of known size (*finite population*), is an important facet of sampling procedure. The problem of choosing the right size of sample, however, is a little more complicated. The simplest rule is that *the larger the size of sample, the more likely it is to give a reliable picture of the parent population*. A useful technique for estimating a randomly selected sample from a give population,

was worked out by Isaac & Michael (1971) cited in Magi (2007: 116). The formula indicated that was as follows:

$$S = \frac{X^2(NP)(1-P)}{d^2(N-1) + X^2P(1-P)}$$

Where:

- S = The required sample size, N = The given population size
- P = The population proportion assumed to be 0,5. This magnitude yields the maximum possible sample size required.
- d = The degree of accuracy as reflected by the amount of error to be tolerated with changes in sample proportion p about population proportion P [the value of $d = 1,96 s_p$].
- X²= Table value of chi-square for one degree of freedom relative to the desired level of confidence, which is 3,841 for the 0,95 confidence.

In order for the sample to be representative of the various communities, a randomly stratified sample has been pulled out covering the following: gender, marital status, level of education, age and socio-economic standing. For purposes of this study, the research methodology used in the analysis of the data involved usage of a stratified sample size of 127 respondents, who were categorised in the Maphelane-KwaMbonambi area as follows: outdoor recreation officials [12], tourists [19], tour operators [15] and local community [81]. Data were analysed using the statistical package for the social sciences [SPSS] programme, available at the University of Zululand.

1.9.3 Instrumentation

According to Bell (1992) a questionnaire is a collection of written statements or questions relating to the situation or phenomenon being studied. For purposes of this study, the empirical data was collected by using a questionnaire. A series of statements relating to outdoor recreation tourism education was formulated and then arranged in such a way that the questionnaire was designed.

These questionnaires were designed in line with the objectives of the research study. They contained closed-ended and open-ended questions. Data collection, as stated earlier, centres around two methods; self-administered questionnaire and person-to-person interviews. In order to reveal respondents' feelings, the questionnaire has been structured to focus on: demographic characteristics, understanding of outdoor recreation resources and make-up, perception of management elements as well as nature and natural recreation resources related to tourism.

1.9.4 Collection of data

Data relevant to this study was collected from various sources. Data collected focuses on tourism education, policy, tourism education policy and application. The researcher utilised a variety of data sources to construct the core of the questionnaire. These include the following: White Paper on Environmental Management Policy for South Africa (DEAT, 1997); GEAR Development Strategy 1999-2000 (DEAT, 1998); Unblocking Delivery on Tourism Strategy by Government Departments (DEAT, 2000); Responsible Tourism Manual in South Africa (DEAT, 2002); South African Environmental outlook: A report on the state of the environment (DEAT, 2006).

1.9.5 Data analysis and interpretation

According to Magi (2007: 126) the purpose of analysis is to reduce data into intelligible and interpretable analysis and that depends on the chosen research design, whether it is qualitative or quantitative and the nature of data arising out of research instrument used. The proposed study data was analysed using a computer assisted analysis of data based on the programme called the Statistical Package for Social Sciences (SPSS).

The collected data was presented quantitatively and was interpreted with the aim of explaining and finding meaning to the research results in order to be able to draw conclusions about the objectives and hypotheses of the research study.

1.9.6 Pilot study

Before the research instruments are used for the collection of data from the respondents, it is essential for the researcher to conduct a pilot study. According to Magi (2007: 99) A *pilot study* is a miniature study conducted on a small group with a view of trying out if the research design can work. The pilot study is there to test some important aspects of the research design, such as terms and concepts, hypothesis, questionnaire, and analytical tools. In cases where the hypothesis is unsuitable, it may be changed or replaced with a better one. The basic aim of the pilot study is to give research feedback, which has the advantage of reducing the margin of error and saves the researcher some loss of time and money.

1.10 STRUCTURE OF THE RESEARCH STUDY

The structure of the research study is organised into five chapters. Chapter one gives the introduction to the problem of the study. In this chapter the researcher introduces the reader to the background of the problem, statement of the problem, objectives and hypotheses of the study, delimitation of the study and the definition of the main terms in the problem statement of the study. The chapter finally presents the outline of the research methodology and all related procedures.

Chapter Two comprises mainly the theoretical framework. In this chapter the literature relevant to this particular study is discussed. This entails looking at

the broad status of the problem to be investigated. The key principles discussed include: outdoor recreation resources, natural environment area, marine recreation area, resource management strategies, underdeveloped economies, environment management tools, national environment management act (NEMA), perception of opportunities and establish what has been done thus far in this field of study

Chapter Three focuses on the physical setting of the study, which covers, location, demographics and the history of the study area as well as economic resource characteristics. This chapter also provides an overview of what is available in the study area.

Chapter Four contains the analysis and interpretation of data collected through empirical investigation. The researcher restated the objectives and hypotheses as a basis for highlighting the acceptance or rejection hypotheses. Demographic analysis was done through the use of tables. On the other hand, the hypothesis-based statements were analysed using the pertinent statements.

Chapter Five gives the summary, conclusions and recommendations of the research study. On the whole this chapter gives the fundamental outcomes of the study based on the core hypotheses, which relate to outdoor recreation understanding, management and community benefits. Recommendations were constructed on the basis of supported and rejected hypotheses.

1.11 ETHICAL CONSIDERATIONS

The focus of this study is on investigating the management strategies in place towards promoting outdoor recreation resources in the Maphelane environment. The ultimate goal in this study is to emphasise the conservation of the natural resources and environmental services and products, as a pre-condition for optimal socio-economic development, and thereby promoting

sustainable resource-development for the benefit the local community. Furthermore, the study was designed in a way that focuses on the expected ethical standards and principles related to research. These include the following:

- Ethical issues relating to the researcher as an individual, that is, the research study shall not be undertaken for personal financial gain.
- Research and academic plagiarism shall be totally precluded from this study, particularly as relating failing to acknowledge all secondary sources used in the study and any materials cited.
- Misuse of privileges afforded to the researcher by the respondents, that is, invading the respondent's privacy during the data collection stage of the research process.
- Confidentiality and privacy of the information provided by the respondents shall be protected by keeping the information given not to be disclosed.
- Anonymity of the respondents, as well as the identity and privacy of the respondent shall remain protected as was promised from the very onset of the investigation.
- The researcher had acquired a voluntary and informed consent of the respondents to the study. The study shall therefore conform to the principle of voluntary consent where the respondents shall participate in the study willingly. Informed consent shall be based on information and identification of the researcher.

In addition to the ethical considerations listed above, there are those that are directly related to the researcher such as: the dissemination of research findings as well as the fair implementation of the findings, which will be publicised. Finally, the observation of academic freedom as well as

institutional rights, relating to issues of intellectual property, are some of the matters that would be given due recognition.

1.12 CONCLUSION

Fundamentally, this chapter has attempted to describe the procedure followed in mapping out the aspects of the entire research study to be investigated. In other words, the chapter sets the scene of what is to be covered or focused on in the process of investigation, hence the chapter heading: 'orientation to the study'. The chapter results in the effective and efficient management strategies of outdoor recreation resources in the Maphelane area. The strategies mooted could, in turn, result in better understanding and positive perceptions of Maphelane by the local community. In addition communication between and among all stakeholders is vital and is clearly outlined herein. Design of the study and tools to be utilised in completing the research have been indicated.

The main purpose of this chapter was to give the reader an overview of the study as a whole. The overview first stated the research problem and the purpose of the study. The problem statement is important in setting forth exactly what the ultimate goal of the research is. Secondly, the objectives and hypotheses of the study were presented with a view of making educated guesses about the outcome of the research analysis. Thirdly, the chapter provided definitions of the commonly used concepts and highlighted the structure of the study. Through this orientation to the study, it was believed that the reader would find it easy to grasp the main ideas and problem statement in this study.

CHAPTER 2

THEORETICAL BACKGROUND

2.1 INTRODUCTION

Tourists' destinations are both domestic and international visitors' places of interest. Consequently, a place that is of no interest to tourists is not their destination. Through marketing, however, such a place could attract the attention of potential tourists. Certain attributes that are unique to such places could attract and hold the attention of potential tourists and ultimately attract them. A proper understanding of tourists needs and a commitment to develop resources to cater for such needs are requisite for success. Whether the place remains tourists' destination success would depend on whether it was managed in a sustainable manner or not (DMP, 2002).

The understanding of natural resources and outdoor recreation facilities for the benefit of all stakeholders, should be seen in the context of spatial requirements and necessities. This chapter has the intention of clarifying these spatial requirements. It is also important to contextualise the description and meaning of the Maphelane environment, also known here as Maphelane-KwaMbonambi. The Maphelane Nature Reserve is under the administrative jurisdiction of the KwaMbonambi Local Municipality, and the KwaSokhulu rural and tribal area has its residents paying homage to the traditional authority of KwaMbonambi. The biodiversity, conservation and management of Maphelane has been placed under the day-to-day management of the iSimangaliso Wetland Park Authority (KwaMbonambi

IDP, 2007; Truman Buthelezi, 2009; iSimangaliso Wetland Park Authority, 2009).

2.2 OUTDOOR RECREATION RESOURCES

In chapter one it was correctly stated that the term 'outdoor recreation' is used, in a general sense to include activities associated with both the natural and cultural environments. Outdoor recreation and nature-based recreation have often been used synonymously to denote recreation activities which take place strictly and directly in the natural setting (McCall & McCall, 1977). It does not include out-of-doors recreation.

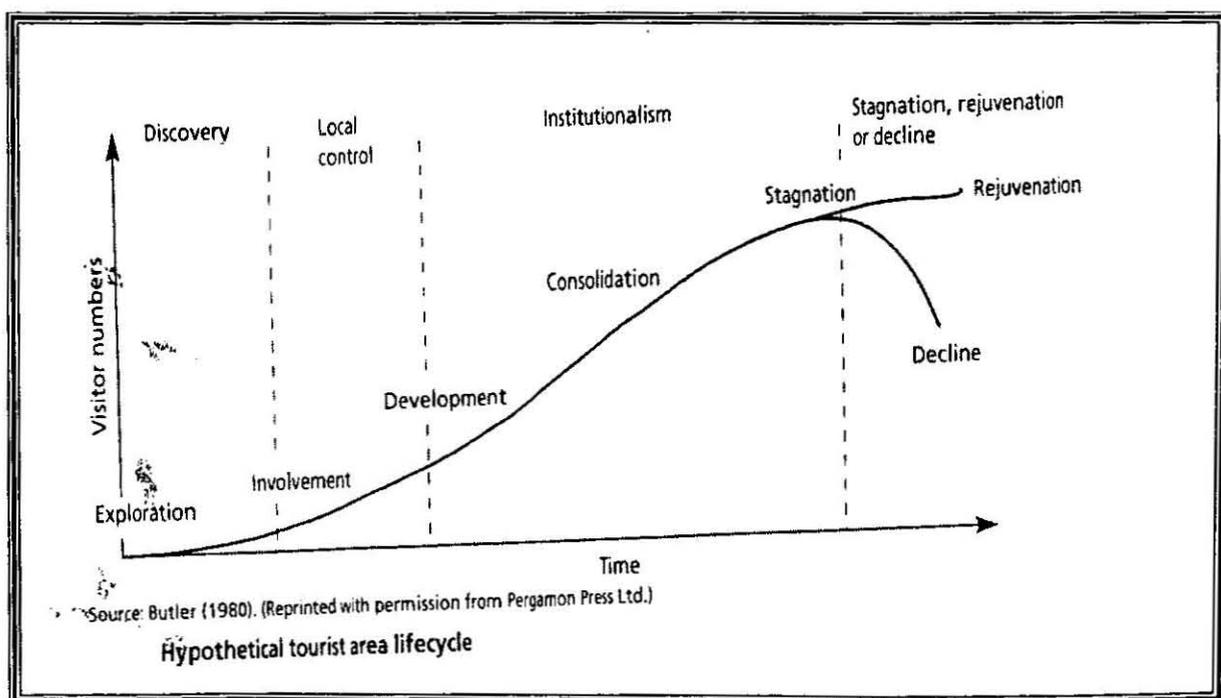
Outdoor recreation resources can be renewable or non-renewable. Natural resources for outdoor recreation include areas of land, bodies of water, forests, swamps, and other natural features including air spaces which are in demand for outdoor recreation. The physical characteristics of these natural elements of the landscape affect their use for outdoor recreation, but they become resources for outdoor recreation only in so far as they are useful for this purpose. Land, water, forests and other natural features which, for any reason, are not used for recreation are not part of the present outdoor recreation resource, although they may have future value for this purpose.

In this respect outdoor recreation is not different from any other use of natural resources such as farming, forestry, grazing and mining. On the other hand, the natural scenery, which brings about the desired recreation experience within a natural area or game reserve, has a huge potential to be used, not only aesthetically, but also functionally wherein the local community of could benefit substantially from the recreation resources (Magi 1986).

2.2.1 Outdoor Recreation Resource as a Tourist Destination

The nature and severity of the emotional stresses and strains of modern life have been emphasised by many writers (Patmore, 1983; Pigram, 1983; Peter, 1992), to play a role in embellishing tourist destinations and outdoor recreation resources. Recreation in general, and outdoor recreation in particular, comes through as modern leisure and tourism opportunities for free choice. The nature and lifespan of any tourist destination are, therefore, unique. Some destinations may have a lifespan of one hundred (100) years while others may have one as short as a few months or years. The growth cycle is exemplified in Figure 2.1 below.

FIGURE 2.1: PRODUCTIVE LIFE CYCLE OF OUTDOOR RECREATION RESOURCE DESTINATION



[Source: Butler (1980) Reprinted with permission from Pergamon Press (Ltd)]

The productive life cycle of outdoor recreation resource, can be represented by the growth and decline stages which go through: exploration, involvement, development, consolidation, stagnation, then decline or rejuvenation. These six stages of the product life-cycle of outdoor recreation resources in destinations, can be associated with Rostow's stages of economic growth (Magi, 1986), where destinations may grow, decline and rejuvenate. In the case of an instant resort like a game park or reserve, the initial stages (involvement and development) may be of limited occurrence and patronisation until such time the resource becomes better known and popular to the recreation stakeholders and communities.

(a) The Discovery Stage

At this stage recreators or tourists are primarily drawn to the destination by its unique or different natural and cultural features. Recreators make use of local facilities. Contact with local communities is also likely to be high. The area stays relatively unspoilt. None of the effects of tourism, particularly the negative ones, are found. Commercial development of natural resources is thus balanced (Pearce, 1994 as cited in Sharpley, 1999).

(b) The Involvement Stage

As the number of visitors begins to increase the involvement stage is reached. The host community begins to provide facilities including accommodation. The potential for resource development is recognized and some natural resources are undertaken which further increases the number of visitors. The results of this growth stage are that the approach to recreation or tourism becomes more commercial, although the relationship between tourist and the local community remains harmonious (Sharpley, 1999). Activities or programme such as marketing or promotion of the resources leads to the improvement of outdoor recreation in general.

(c) The Development Stage

This stage is characterized by an influx of recreators and tourists and, at times, the number of recreators exceeds the number of local inhabitants. Initially a wide range of local destinations or areas are set up to provide for the needs of tourists while controlling according to carrying capacity. Conflict among users of outdoor recreation resources often arises when there are too many people seeking to do too many incompatible things within a destination at the same time (Sharpley, 1999).

(d) Consolidation Stage

This stage is marked by a slow-down in the rate of growth of visitors to the facility, compared to the growth rate during the development stage. The destination has lost its exclusivity and unique selling points. Aggressive marketing strategies are to be initiated for the area to maintain its market share of visitors and to attract new ones.

(e) The Stagnation Stage

During this stage the number of tourists reaches a peak. The area is no longer seen as attractive, therefore no new visitors or recreators are attracted to it. The local community is left with a declining area. The nature reserve has lost its attractiveness and unique features have been spoilt. This decline in growth results in a lack of investment as less attention is paid to the destination.

(f) The Stagnation / Rejuvenation Stage

This is the final stage where the destination declines. Tourist numbers begin to show significant decline in attractiveness as more attractive alternative destinations are developed. Conservation measures taken to prevent the

destination from a complete decline are engaged. As the signs of decline are noted efforts are made to rejuvenate the destination by seeking new methods of doing things, new markets are penetrated and more financial investment is made into the destination to make it attractive and prosper once more. Butler (1980) suggests two possible approaches which can help in rejuvenating a destination. Firstly the destination can add a man-made attraction, alternatively, the previously untapped natural resources can now be exploited.

2.2.2 Types of Outdoor Recreation Areas

There are five types of outdoor recreation areas, which have been recognised. These outdoor (natural) recreation areas have been seen as: (a) topographical recreation resources, (b) natural environment areas, (c) inland water recreation areas, (d) marine recreation areas, and (e) historic and cultural recreation sites. These outdoor recreation areas are briefly described below (Mwandla 2002).

(a) Topographical Recreation Areas

These are nature-based recreation areas such as nature reserves, inland water, mountains, hills, plains and other topographic recreation areas related to the relief of the area. They provide spectacularly aesthetic scenery – the rocks minerals and water – and are of cultural, geographical and spiritual value. They appeal to the sense of space and contrast unmatched with most outdoor recreation resources found in urban recreation.

(b) Natural Environmental Areas

This comprises areas with indigenous forests, game parks grasslands and nature reserves. The most famous places are Hluhluwe-Umfolozi Game Reserve and the Kruger National Park. Coastal reserves include Sodwana

Bay, Sodwana State Forest, Kosi Bay, and the St Lucia complex [St Lucia Game Reserve including the study area – Maphelane Nature Reserve, St Lucia Marine and St Lucia Park], (Mwandla, 2002). Most of the recreation activities in these areas include game viewing, sightseeing, camping, picnicking, self-guided walks and trails, fishing and swimming. The natural environmental areas are regarded as one of the major tourist attractions and vacation spots worthy of consideration in outdoor recreation planning and management. Therefore, the local communities of any nature reserves need to be brought on board to play a vital role in the management and development of these environmental areas.

(c) Inland Water Recreation Areas

This is made up of rivers and large water surfaces that include lagoons, lakes, ponds and man-made dams which are enjoyed by tourists. The large water surfaces could take the form of natural area of the above mentioned areas. Another type of inland water recreation facilities are the lagoons at the estuaries of several river (DMP, 2002; UIDP 2002, 2008). The lagoons, like large storage dams, have good quality fresh water suited for recreation purposes. Usually, lagoons are more developed than other types of outdoor recreation areas. Development includes accommodation facilities so as to spend long times at these spots. The inland water recreation areas have unique recreation activities such as providing areas for canoeing, motor-boating, boat fishing, angling, swimming and fishing (Mwandla, 2002). The recreation activities around and on water areas are similar to those associated with the activities found on the sea areas.

(d) Marine Recreation Areas

According to Taylor (1984) marine recreation areas are so obvious that it is hardly necessary to define them. Marine recreation area is the sea-water

itself, including the beaches which are regularly covered by the swell. The coastline has a wide range of natural and human-made attributes that make the area an attractive tourist and recreation destination. This includes sea water and beaches. The coastline also provides an excellent area for swimming, fishing, angling, surfing, water skiing, motor boating and sailing (Patmore & Glyptis, 1979).

Marine recreation areas have a special significance to cater for the needs of outdoor recreation participants. The marine areas that comprise sea couple with beaches, lagoons, estuaries, bays and harbours; are unique to KwaZulu-Natal as compared to the other five inland provinces (namely, Free State, Mpumalanga, Gauteng, North West and Northern Province). Management of marine recreation areas should involve all government stakeholders (Mwandla, 2002).

(e) Historical and Cultural Sites

Outdoor recreation resources are not only nature-created, but also relate to those that are human made. These man-made resources are the products produced by authorities or government and seem to symbolise history, culture and heritage. Some of these man-made resources are museums and art galleries, as well as historic buildings which include castles, palaces, churches and house. It may be argued that these human creations are at times intended to glorify God the Almighty.

2.3 OUTDOOR RECREATION POLICIES AND EXECUTION

Management is both an active human occupation as well as a process by which people and organisations achieve desired results. Management is a distinct type of work which concerns the work of people, effectiveness and

accountability for end-results (Peter, 1992; Buultjens, *et al.*; 2003). Management is an optimal blend of all of these. Success in management thus depends on a variety of factors such as the situation, the people involved and the organization (Hendee, *et al.*, 1990). Outdoor recreation management involves the development and implementation of policies designed to conserve nature-based recreation resources and develop recreation facilities while maximising the advantages to be gained from their desirable recreation usage. There are some management principles that can be used as a basis in formulating policies for managing resources of an organization. When policies have been agreed on, specific guidelines are developed that help define the organisation's optimal performance (Spenceley, 2003; Torkildsen, 2005).

The principles applicable in the management of outdoor recreation resources in a natural environment are as follows (Pigram, 1983; Spenceley, 2003; Torkildsen, 2005):

- Minimise negative impacts on nature and culture that can damage a destination;
- Educate the stakeholder and users of the destination on the importance of conservation;
- Emphasise the importance of responsible nature reserve management which works cooperatively with local authorities and people to meet local needs and deliver conservation benefits;
- Direct revenue to the conservation and management of natural and protected areas;
- Emphasise the need for regional tourism zoning and for visitor management plans designed for either regions or natural areas that are slated to become eco-destinations;

- Emphasise use of environmental and social base-line studies as well as long-term monitoring programs to assess and minimize negative impacts;
- Strive to maximize economic benefit for the host country, local business and communities – particularly people living in and adjacent to natural and protected areas;
- Ensure that tourism development does not exceed the socially and environmentally acceptable limits of change as determined by researches in cooperation with local residents; and
- Rely on infrastructure that has been developed in harmony with the environment which minimises use of fossil fuels, conserves local plants and wildlife while blending with the natural and cultural environment.

The principles of visitor management have largely evolved from the 1960s' thinking regarding carrying capacity and the need to intervene in the management of specific sites and areas. The aim is to ensure environmental degradation does not directly destroy the resource base for future generations (Pigram, 1983).

The limit of acceptable change method has in the meantime also been developed (Stankey, 1972). This method recognizes that a single carrying capacity figure is unrealistic. Since change is inevitable it is necessary to determine beforehand the acceptable level of change. In this particular study integrated environmental management, management tools and co-management used to conserve and preserve the natural reserve have been looked into. The community is involved in all matters that affect it. Elected community representatives are engaged during the planning stage and in the management of the reserve. The activities taking place in such a natural

reserve could involve the community in aspects such as need assessment, assessment of community awareness, industrial legitimacy, opportunity recognition, co-operation, communication and compromise (Stoddard 1993; Magi & Nzama, 2009a).

2.4 COMMUNITY ATTITUDES AND PARTICIPATION

Community attitudes towards recreation use of their land inevitably reflect their assessment of the balance between benefits and costs involved (Libanda & Blignaut, 2008). There are signs that if there are perceived economic benefits from outdoor recreation communities adopt a more positive view of such recreation. Reserve managers and outdoor recreation users have fairly well agreed-upon standards or values of using natural resources. A large number of people involved in decision-making about the reserve have positive attitudes concerning conservation of natural resources in the study area. That contributes towards the sustained conservation of the natural quality of the area (Mamete, 2006).

Many local people involve themselves in programs of the reserve such as marine regulations awareness and compliance campaigns as well as engagement in co-management where all stakeholders are involved, that is, municipalities, local authorities, councillors, officials and the community (Mamete, 2006).

Community participation in outdoor recreation resources can be regarded as the basis for acquiring recreation experience as well as the times of encounter with recreation resources, facilities and activities, that are available to the stakeholders (Torkildsen, 2005). According to the Wikipedia Encyclopaedia (2009) the concept 'participation' may have three shades of meaning. These

are participation as in ownership, participation as in decision-making and participation as in financial benefits. In all these shades it means sharing something in common with others, it may be related to ownership, decision or benefits (Libande & Blignaut, 2006; Magi & Nzama, 2009a).

The nature based recreation authorities have realised that recreation is a well regarded generator of opportunities and benefits to local communities. As such, for recreation to have long-lasting economic yield for the destination regions, it has to be humanised and not just driven by market forces. The participation of local communities, and attempts to incorporate their cultures and tradition in planning, suggests that there should be respect of these host communities (Mowforth & Munt, 2008).

According to Badmin *et al.*, (1988) there are numerous factors that can assist in stimulation recreation and tourism planning and programming processes for economic empowerment and development in nature based areas. These include the following:

- (a) **Quality.** The quality of a facility in terms of its economic, social cultural and heritage value, will strongly influence the type of user that will be attracted to the facility.
- (b) **Capacity.** The capacity of a tourism attraction controls the number of people that can be contained in a facility, without it losing its uniqueness value based on emotions, atmosphere, discovery and authenticity.
- (c) **Activity.** The range and intensity of activities offered by the culture-based facilities can be used to different effects. Cultural festivals,

carnivals, museums, monuments and heritage sites, can be a persuasive tourist attraction.

- (d) **Supporting equipment.** It is not only the tourism facilities that promote enjoyable experience, but supporting equipment such as halls, restaurants, parks and spars can enhance the experience. Supporting equipment can be smaller and manufactured (e.g. music system) to enhance the quality of the tourism event.
- (e) **Facility availability.** An important technical factor that should not be taken for granted is the availability of the facility to be used by the public. In theory, a hall, stadium, conference centre or museum, is readily available at all times, but in practice this is not so. Some facilities have to be funded and maintained by the government or community.

It is anticipated that these factors should contribute towards policy, planning and programming of recreation facilities and activities in the study area. The factors would also theoretically facilitate the understanding of existing outdoor recreation processes at the Maphelane-KwaMbonambi municipal area.

2.5 OUTDOOR RESOURCE MANAGEMENT STRATEGIES

The purpose of this study was to find out the management strategy used at the Maphelane Nature Reserve, also designated as Maphelane-KwaMbonambi, to conserve natural resources. It was essential for the researcher to consider the strategies used at underdeveloped and developing countries (Hendee, et al, 1990). For purposes of understanding the planning and management of recreation facilities in the Maphelane-KwaMbonambi municipal area, some of the following objectives have been proposed: the understanding of outdoor

recreation processes; the workings of the promotion, participation and utilisation of resources in the area; assessing the local economic development potential emerging from the management practices; examining the planning and management strategies entrenched in the area; and finally the formulation of suitable policies and strategies for the Maphelane-KwaMbonambi Municipality [KwaMbonambi IDP, 2007; <http://www.kzntopbusiness.co.za/site/mbonambi>, (2010)].

2.5.1 Underdeveloped / Developing Countries

The importance of resource conservation is being increasingly acknowledged in developing countries as a necessary concomitant to economic growth and development (Paul, 1987). In the 1980's the South African government formulated and amended several resource management acts and regulations. Within the East African region government ministries, departments and institutions have been established to tackle environmental and resource-related problems. There are problems, however, that seem to be undermining the efforts of developing countries. These problems create an impression that developing countries pay lip service to the notion of natural resource conservation (Rogerson & Visser, 2004; Spenceley, *et al*, 2002).

Throughout the developing countries there is a pressing need to support and expand facilities for education, health and other social services. While this is a legitimate priority, it often takes the scarce capital and manpower away from sectors concerned with matters such as resource conservation whose benefit is realized slowly and less conspicuously (Wahab, 2000).

Generally there is poor knowledge about the functions of marine, sand dunes, water and coastal geomorphologic features. Little is known about the

interactions and interdependences between sea and land, the vulnerability of estuaries and coastal subsystems and the impact of human practices on some critical habitats. Progress with conservation measures has, therefore, been slow and never kept pace with environmental deterioration. In almost every country in the region, conservation legislation takes considerably long time to be passed, amended and implemented while practices that are destructive to resources continue at an increasing rate.

According to United Nations Environmental Programme [UNEP] annual report (UNEP, 2005) on regional studies, the following remarks are pertinent to address problems and resource management needs of the coastal region of East Africa. The challenges existing include some of the following:

- (a) There were generally no specific national policies and no clear institutional responsibilities for the conservation of marine and littoral habitats and species. Environmental ministries dealt generally, but not specifically, with them,
- (b) There were only a few trained personnel capable of planning and implementing conservation programs in the marine and coastal environment,
- (c) Conservation related to recreation and tourism development had received greater priority, whereas the safeguarding of subsistence and commercial fisheries had hardly been considered,
- (d) There were no mechanisms for the joint management of marine resources between and amongst two or more regions.

On the other hand, nature conservation in Britain has been remarkably successful because partnerships have existed between and among the statutory bodies responsible for it and the non-governmental organizations of local naturalist trusts, the national trusts, natural history societies, educational

institutions and many other interested groups. The success of marine nature conservation also depends on the durability of such partnerships. New perspectives are already emerging as a result of the work done in accordance with the Wildlife and Countryside Act, 1981 which provides an additional impetus and necessary guidelines [<http://www.thefreedictionary.com/nature+conservancy+council>]. (2009)].

2.5.2 Management Strategies: Developing Countries

According to the Nature Conservancy Council (NCC) [<http://www.thefreedictionary.com/nature+conservancy+council> (2009)] the quality of recreation experience is affected by the design, the instrument and the management of the particular outdoor recreation area. In this respect, outdoor recreation is similar to many other social services and many other productive processes of a physical character. In the case of outdoor recreation resources there are means of managing and / or sustaining the satisfaction enjoyed by average users while increasing the number of such users (Hendee, *et al*, 1990).

In the study area, recreation and municipal managers and other stakeholders, such as municipality officials, councillors, Inkosis and community workers, work together as partners to improve the conservation methods and procedures of the nature reserve. The purpose is to preserve the quality of natural resources available in the area. The Constitution of South Africa as well as the Local Government Act, are documents that have established guidelines for human settlement, usage of resources and management of the environment. The Constitution sets objectives for local government as including: (a) sustainable provision of services to communities; (b) promoting social and economic development; (c) ensuring a safe and healthy environment; (d) encouraging community involvement in local government

matters (DEAT, 2006a: 75). In other words, the community strategies must be aimed at improving the well-being of local people and to contributing to achievement of sustainable and consistent recreation delivery. Encouraging utilisation of outdoor recreation resource at off-peak time is one of the most promising means of maintaining its quality while increasing output.

In the study area average local people are taught to appreciate quality in outdoor recreation experience and gain greater satisfaction with less wear-and-tear inflicted on the environment. Regeneration strategies are engaged in order to retain and maintain such nature reserves.

2.6 OUTDOOR RECREATION MANAGEMENT

According to Glavovic (2000) outdoor recreation management involves the development and implementation of policies designed to conserve nature-based recreation resources and develop recreation facilities while maximising the advantages to be gained from their necessary or desirable recreational usage. Then, a recreation manager has to determine the principles upon which the outdoor recreation management policy could be formulated. These principles were expected to provide the point of departure, for translating the perceptions into practice. They are the fundamental basis for reasoning and action (Hendee, *et al*, 1990).

Several authors (Pigram, 1983; Hendee, *et al*, 1990; Peter, 1992) have contributed to clarification of some principles of recreation management: in the context of resource management in developing countries. Some of these are as follows:

- (a) Local authorities should be urged to co-operate with regional or provincial authorities in the development of recreation facilities.

- (b) A comprehensive and co-ordinated management policy must be formulated.
- (c) The promotion of community-based outdoor recreation and tourism projects was essential.
- (d) Locally initiated recreation development schemes receive regional and national finance.
- (e) Constant research was needed to determine and formulate policies for the optimum utilisation capacity of recreation sites.
- (f) In the case of physical structures, the intensity of use and abuse thereof requires the employment of an adequate number of full-time wardens and rangers.
- (g) Steps need to be taken to control the flow of visitors to recreation areas
- (h) A national initiative is called for to stimulate co-operation on a regional basis to produce the guidelines for local action.
- (i) Control of traffic, car parking and volume of pedestrians must be exercised at recreation sites.
- (j) Overpopulation is a threat to any established recreation focal point.
- (k) Large car parks need to be created in more appropriate locations and visitors encouraged using public transport at recreation sites.
- (l) Areas under pressure should become restricted access zones with entry permitted only to residents, other essential users and public service vehicles.

Therefore, in the Maphelane-KwaMbonambi Municipality, management on the nature reserve was founded through establishing committees, which involve all stakeholders. The goal is to eliminate activities that impact negatively on the outdoor recreation resources. As with nature reserves on

land, the policy of management is to permit activities that are compatible with the primary objective of conserving the flora, fauna and other features of special interest (Peter, 1992).

Management aims not only to conserve the reserve, wildlife and other features but also to provide for the use of the reserve for research, education and leisure where they are compatible with conservation. Wildlife habitats on land require human control and interference, as well as protection to maintain their special interest. Marine habitats, being in a more natural condition, rarely require management (Hendee, *et al*, 1990).

2.7 TOURISM AND THE ENVIRONMENT IN HARMONY

Tourism has been credited with the enhancement of the environment, although this seems to be the exception rather than the rule. Mathieson & Wall (1993), cite four areas of contribution:

- (a) Recreation provides the incentive for conservation, as well as economic means by which this can be accomplished. Recreators visiting the area for sightseeing and other recreation purposes provide the financial resources to maintain and develop the area.
- (b) Recreation and tourism, particularly in Africa, has provided the impetus for the conservation of natural resources. The so-called species parks of South Africa have helped ensure that threatened species such as the Ado elephant, mountain zebra and bontebok are saved from extinction.

combine their trips with visiting relatives. Many of these visits occur during the festive season and school holidays (KwaMbonambi IDP, 2007).

2.9 IMPACT OF OUTDOOR RECREATION ON THE ENVIRONMENT.

Spenceley, (2003: 56) in her publication entitled: '*Tourism, local livelihoods and the private sector in South Africa: Case studies on the growing role of the private sector in natural resources management*', has identifies the recorded environmental impacts of tourism on the ecosystem during all the phases of recreation development. These impacts depicted in Table 2.1 and Table 2.1b. include and affect a variety of environment components, such as, the landscape, water resources, features of the atmosphere, habitat related features, geology and soils, as well as wildlife and aesthetics in the KwaMbonambi-Maphelane environment.

The recreation impacts [Refer to Table 2.1a, 2.1b] on the environment occur in the form of development on the landscape, disposal of waste into the sea, rivers and lakes and excessive usage of water. All these have great impact on the environment. Air pollution from vehicle emissions and noise from tourist transportation and activities have also been judged as having negative impacts on natural resources.

A counter-argument in Spenceley & Goodwin (2007) suggests that there are some studies that have demonstrated that isolated efforts from organisations and stakeholders, that there are more benefits from recreation than negative impacts. As such, recreation benefits have little tangible impact on the majority of people living in highly populated rural communities, whereas impacts are substantial for the few people who directly benefit from recreation.

TABLE 2.1a: IMPACT OF RECREATION ON THE ENVIRONMENT

Environmental Component	Recreation activities	Environment impacts
Landscape	Formal and informal development	<ul style="list-style-type: none"> • Visual impact of settlements on the landscape. • Potential improvement in landscape appearance through preservation of heritage structures.
Water	Disposal of waste into the sea, lakes and rivers	<ul style="list-style-type: none"> • Contamination and potential health hazards. • Introduction of minerals, nutrients, sewage, petrol and toxins to the environment.
	Increased consumption	<ul style="list-style-type: none"> • Reduce water availability for human and ecosystem function.
Atmosphere	Increase in transport activities and facility power requirement	<ul style="list-style-type: none"> • Air and noise pollution from vehicles • Pollution from facility power source relying on non-renewable energy sources (e.g. diesel generators).
Habitats	Cleaning for construction and tourism facility, increased use of natural resources by facility	<ul style="list-style-type: none"> • Decrease of natural habitat, due to resource use and /or tourism construction • Visitor activities and associated infrastructure • Transportation (e.g. roads) • Loss of vegetative habitat due to competition with invasive weed species from tourism landscaping • Increased fire frequency leading to habitat change and loss
	Collection of plants, flower, and fungi	<ul style="list-style-type: none"> • Change in species composition • Disappearance of rare species
Geology and soil	Collection, vandalism, erosion	<ul style="list-style-type: none"> • Removal of minerals, rocks, fossils and items of archaeological interest. • Graffiti on rock outcrops. • Poorly designed walking paths causing erosion • Associated transport impacts of road development (e.g. soil compaction, transport and spread of pollutants.)

[Source: Spenceley, (2003)].

The two authors (Spenceley & Goodwin, 2007) also argue that for some environments, despite the presence of strong supportive policies and attempts by local stakeholders to generate socio-economic benefits for local

communities through recreation, there are still questions regarding the extent to which recreation growth and development actually have positive impacts on the South African poor communities.

TABLE 2.1b: IMPACT OF RECREATION ON THE ENVIRONMENT

Environmental Component	Recreation activities	Environment impacts
Wildlife	Unethical hunting and fishing	<ul style="list-style-type: none"> • Changes in species composition and social behavior (e.g. elephants, lions); disappearance of rare species
	Pollution	<ul style="list-style-type: none"> • Habituation of wildlife to waste disposal areas as sources of food. Effect on health including psychological stress, behavioral changes and reduction in productivity due to noise pollution.
	Potential Wildlife harassment resulting from viewing and photography	<ul style="list-style-type: none"> • Behavioural changes: Habituation, resulting from feeding and interaction with humans. • Physiological changes: Change in heart rate, effects on growth rates and abundance • Species Composition and distribution: Changes in species composition, diversity and abundance and inter-specific interactions • Disruption of feeding: found in birds, rhinoceros, hunting behavior in cheetah and lions • Effect on breeding success: Direct destruction or abandonment, and increase predation on bird nests. Decreased hatching success in birds, Disruption of reproductive behavior in antelope.
	Development of highways and trails in natural areas	<ul style="list-style-type: none"> • Species-specific disturbance caused by roads, buildings and plantations. Barriers effects to carnivores, collisions, increased accessibility to wild areas by poachers
Aesthetics	Traffic congestion, overcrowding	<ul style="list-style-type: none"> • Increase in the risk of all impact mentioned above • Changes in 'sense of place'.

This research study, therefore, wants to make a contribution in addressing that research problem. When considering the impact of outdoor recreation in an environment brought about by the over increasing number of recreators coming into contact with the environment, it would without doubt lose its beauty if it is not fully controlled.

According to Cooper *et al.*, (2008) the environment whether is natural or man-made, is the most fundamental ingredient of tourism product. However, as soon as tourism activity takes place, the environment is inevitably changed or modified either to facilitate tourism or during the tourism process. The clearing of construction and tourism facilities has caused negative impact on natural resources as a result that natural habitat decreases. Environmental impact associated with tourism development could be considered in terms, of the direct, indirect and induced effects.

Some authors (Abeyratne, 1999; Cooper *et al.*; 2008) have already asserted that recreation and tourism, of whatever nature and dimension, can and do have adverse impacts on the environment, especially those on protected areas. The recreation industry has a responsibility to ensure environment interventions aimed at minimizing adverse impacts as these could result in substantial loss in revenue and negatively affect the promotion of positive impacts (WWF, 2001: 1). Management is of particular importance when recreation activity intensifies in fragile coastal, fresh water, mountain ecosystems and protected areas. This is where recreation intensity has a multiplier or cumulative environmental effect, especially where management is limited (Lim & McAleer, 2004: 2).

It is anticipated that these notions or principles related to the impact of outdoor recreation on the environment and nature reserves, will play an important role in understanding the state on matters in the study area.

2.10 ENVIRONMENTAL MANAGEMENT TOOLS IN OUTDOOR RECREATION DEVELOPMENT

In terms of section 24 (a) of the Constitution of South Africa (Act 108 of 1996), every South African is guaranteed the right to an environment which is protected for current and future generations, and has the responsibility not to inflict any hazard to its health and well-being, through the imposition of reasonable legislative and other measures (DEAT, 2004: 5). To this end, South Africa has adopted the Integrated Environmental Management (IEM) approach, a spin-off from the global environmental assessment and management framework, which provides a suite of environmental management tools to address sustainable development (DEAT, 2004) or responsible tourism in the context of this paper.

There are a number of environmental management tools that have been identified to play a role in assessing the natural resources and community development requirements. Based on the needs of recreation stakeholders and decision-makers, the hierarchy of activity being undertaken by organisations include some of the following: project plan or policy and the stage of the activity life cycle, planning, design, establishment, operation or closure (DEAT, 2004).

According to the Department of Environmental Affairs and Tourism (DEAT, 2004), the strategic environmental management planning tool consists of the following elements or factors:

- Criteria for project-level EIA
- Roles and responsibility indicators
- Cumulative impacts and sustainability indicators
- Regional standards

- Carrying capacity
- Limits of acceptable change
- Spatial development framework

These elements play an important role in assisting outdoor recreation stakeholders, planners and decision-makers to manage natural recreation resources in a more efficient manner.

According to Abeyratne (1999: 33), the United Nations Environmental Programme (UNEP) advocates sustainable development in recreation and tourism through implementation of environmental assessment, environmental management (the effects of humans on the environment) and support measures (through education, training, public information and financial and institutional assistance). In South Africa, the mandate for sustainable development and that of responsible tourism has shifted to local government level, specifically within the constitutional mandate of developmental local government (Urquhart & Atkinson, 2000: 67). In practice, local municipalities have to ensure environmentally sustainable recreation through integrated natural resource planning (WWF, 2001: 3).

Due to the recognition that environmental quality is a dominant factor in making a travel and recreation-related decision, environmental objectives and practices must be incorporated into recreation stakeholder attitudes and management strategies in order to remain competitive in the recreation market (Mihalic, 2000: 65). Four common categories of initiatives to improve environmentally sustainable tourism at the destination have been identified by Mihalic (2000: 68). These are management by environmental codes of conduct; management by uncertified environmental practice; management by green branding on the basis of accreditation schemes; and competitions for good environmental practice. These initiatives, despite being

voluntary, provide sufficient incentive to support tourism destination managers to minimize environmental impact, e.g. The Blue Flag accreditation of five South African beaches recognizing environmental quality and management (Mihalic, 2000: 73).

As a point of departure for addressing lack of information at all government levels, South Africa embarked on its first State of the Environment Report (SoER), published in 1999 [DEAT 2006a]. The report has resulted in pressures on the state to respond to impacts and environmental change in South Africa. Recreation and tourism is part of human activity impacting on environmental change. The SoER provides broad information for decision-makers and implementing agents in tourism development of the current state of the ecosystem, in order to make informed decisions on proposed recreation and tourism development, specifically nature-based recreation ventures (DEAT 2006a, 2000). It also serves to avert non-essential consumption of natural resources and promotes the precautionary approach to recreation and tourism development and management (Urquhart & Atkinson, 2000: 67). The SoER provides for review on a five-yearly basis to assess progress made in terms of achievement of the goal of sustainable development (Urquhart & Atkinson, 2000: 67). The results of the national SoER were disseminated to the metropolitan areas to form the basis for development and formulation of environmental policies to regulate developments such as recreation and tourism (Urquhart & Atkinson, 2000).

The Strategic Environmental Assessment (SEA) is primarily conducted for the assessment of consequences of policy to the environment, the planning as well as formulation of programmes at a strategic planning level including national, provincial and / or regional level(s). The process aims at integrating environmental, social and economic considerations into the conceptualisation

of the policy, plan or programme development (Urquhart & Atkinson, 2000: 74). For the purpose of tourism, an SEA may be conducted at the district municipality level to align tourism development with the available resources and the environmental carrying capacity in order for it to be sustainable. It may also be linked to the spatial development framework of the municipality well as identify ecologically sensitive areas, such as wetlands, mountains and coastal areas which may not be developed for intensive tourism and its secondary diversified economies (Urquhart & Atkinson, 2000). The SEA would ultimately ensure environmental integrity that would be maintained at a level which the broader community would accept, as community participation is an integral part of the assessment and provides an overall framework against which positive and negative impacts of tourism development can be measured. The SEA was expected to inform and guide the integrated development planning processes and subsequent sector plans, such as the recreation plans in the local government, such as the Maphelane-KwaMbonambi Municipality.

Finally, environmental management systems aimed at ensuring that responsible recreation would only be successful if part of the socio-economic benefits would emerge through environmental conservation as well as the restoration of environments degraded by recreation activities (Mihalic, 2000: 65). In order for recreation and tourism developers and operators to prevent or minimise environmental degradation section, the National Environmental Management Act (NEMA) should be introduced and put to effect. The onus and responsibility resides with the developer and/or operator of recreation organisations to operate within the framework of the appropriate recreation guidelines, to promote the triple bottom line approach economies (Urquhart & Atkinson, 2000).

2.11 OUTDOOR RECREATION BENEFITS

It is important to accept that appraisal of recreation opportunities depends on perception of their presence, accessibility and capacity to satisfy human wants. The means of developing recreation benefits should be accepted with a view that in the final analysis they would be utilised to achieve socially derived goals. For example, technological and organisational capacities are central concern, in which recreation resources are understood in this research study (Libanda & Blignaut, 2008):

Whatever recreation resources are studied or analysed for better management, sustainable use and satisfaction of community needs and wants, it is imperative that this process be followed with effective management procedures. This act of recreation analysis, as in this particular research study, depends on factors, such as, identification of recreation opportunities, characteristics of the natural resources, proficiency and expertise of officials, the reservoir of skilled staff and the deployment of organisational and technological ability.

2.12 CONCLUSION

Maphelane is a public nature conservation area. It is, therefore, imperative that appropriate measures be instituted to facilitate sustainable land use in the area that surrounds it. According to Neto (2003: 218):

“tourism should be managed within the carrying capacity and limits of acceptable change for the ecosystem and sites, and to ensure that tourism activities contribute to the conservation of the biodiversity” of the specific area, be it on a local, regional or global scale.

It is clear from the discussions in this chapter that recreation resources use in the environment, at times impact on the environment, as well as that direct and indirect benefits from the environment are at the centre of operation. The participants in the recreation industry, however, still have a long and tedious road ahead of them to show comprehension, commitment and capacity to manage the environment for sustainable use.

This chapter has devoted time at looking at the theoretical basis upon which to investigate the management strategies in place towards promoting outdoor recreation resources in the Maphelane environment also called Maphelane-KwaMbonambi. In other words, the ultimate goal of this chapter was to engage in the clarification of conceptual underpinnings associated with recreation conservation, types of natural resources, environmental services and products, as well as outdoor recreation benefits (Neto, 2003).

CHAPTER 3

THE PHYSICAL SETTING OF THE STUDY

3.1 INTRODUCTION

The attractiveness of man-made features does not only depend on beauty but also on accessibility and location. When it comes to natural features beauty is replaced by quality but location and accessibility remain important. The appeal and quality of natural attractions can be regarded as of primary importance while location and accessibility are of secondary importance. It is for this reason that this section of the study aims at revealing the nature and character of the outdoor recreation resources in Maphelane-KwaMbonambi:

- (a) The exact location of outdoor recreation resources (water based and land based).
- (b) The types of natural assets that Maphelane area possesses.
- (c) The current management of the available outdoor recreation resources.
- (d) The history and the type of community found in Maphelane.

The researcher believes that a thorough descriptive discussion of the four areas mentioned above (a-d) will justify the objectives of this study found in Chapter One. This section of the study furthermore provides a bigger picture about Maphelane and the community found therein, also referred to as Maphelane-KwaMbonambi.

In order to contextualise the study area and its management and administrative setup, it is important to restate that in essence Maphelane is a natural phenomenon or resource in the form of a massive coastal sand dune, with a variety of natural attributes, such flora and fauna. Maphelane is under the administrative jurisdiction of the KwaMbonambi Local Municipality, and the KwaSokhulu rural and tribal area has its residents paying homage to the tribal authority of KwaMbonambi. An agreement exists that owing to the biodiversity and conservation character of Maphelane, the area has had to be put under the conservation control of iSimangaliso Wetland Park Authority. This authority takes responsibility for the conservation, recreation, tourism and related operational activities (KwaMbonambi IDP, 2007; Inkosi Mthiyane, 2010; Truman Buthelezi, 2009; iSimangaliso Wetland Park Authority, 2009).

3.2. LOCATION OF THE STUDY AREA

The Maphelane-KwaMbonambi area, which is the geographic focus area of this study, is in the north coast of KwaZulu-Natal (KZN). This part of KZN is popular among tourists. In addition, the related coastal belt is characterised by land-strips of flat coastal land along the Umfolozi River, the cape of St. Lucia as well as the beaches. It stretches from the sea to the weathered sand dunes along the coast. These coastal flats are mainly in the Uthungulu district municipality and KwaMbonambi municipality. It is made up of portions of two geographical districts, *i.e.* the Sokhulu-KwaMbonambi Traditional Authorities and the commercial plantations along the N2 road. This road is the major economic corridor in the area. The study area is situated on the cape of St. Lucia and the Umfolozi River [See Figures 3.1], (KwaMbonambi IDP, 2007).

FIGURE 3.1 THE MAPHELANE NATURAL RESOURCE



[Source: KwaMbonambi IDP, (2007)].

The St. Lucia Lake environment provides well developed natural beaches which are the main point of attraction for many outdoor recreates. Its borders are the Indian Ocean which is in the East of the study area; Umfolozi River in the North; Cape St. Lucia in the South and Maphelane-KwaMbonambi Municipal area in the West.

3.3 THE HISTORICAL BACKGROUND OF MNR

The importance of looking at the history of the study area lies in that it reveals previous and present provisions of management strategies in Maphelane Nature Reserve [MNR]. Historically Maphelane was the name of a local mountain, which was made up of sand. There were people who lived near that mountain up to 1937. People were removed by the then General Government (GG) from the East of the mountain to the West. The

government promised to take them back after seven year. It was the government who transported them from their place of origin to the new place (KwaMbonambi IDP, 2007).

The transformation happened after the government discovered that the sand dunes were rich with minerals and unique fauna and flora. The two main purposes were to protect the place from aggressive human development and to conserve and preserve natural resources for future generations. The government committed itself to ensuring and maintaining high product quality and a high standard of natural resources available in the area. This kind of development could be achieved through ensuring safety and security of the place by establishing and facilitating an enabling and appropriate legal and fiscal framework. The development and promotion of cultural and natural resource management was another step towards achieving this goal (KwaMbonambi IDP, 2007; Inkosi Mthiyane, 2010),

Later the Government built some structures in the form of huts and planted grass inside them. The new and the old places were not fenced which allowed cattle to graze freely in the area. As time went on the government half-fenced the area forming half a triangle. People complained that they were no longer able to access the beach. An entry gate was then made and the government controlled it. Government guards at the gate asked for the permission for locals to be allowed to pass through. When the area later fell under the authority of the then KwaZulu Government (ZG), part of the area was fenced and people were forced to move out from the newly fenced area. It was then that the Inkosi of the area intervened in defense of his people who were being 'violated and dehumanised' (KwaMbonambi IDP, 2007; Inkosi Mthiyane, 2010).

3.4 DEMOGRAPHIC AND SOCIO-ECONOMIC ATTRIBUTES

The characteristics or attributes related to the population dynamics of the study are important in establishing the nature and well-being of the population. These attributes, related to health, environment, population, employment, education, and so on, are expected to influence how the community benefits from outdoor recreation resources.

3.4.1 Population Distribution

The population of Maphelane-KwaMbonambi and the Sokhulu-KwaMbonambi Traditional areas are an important aspect of this study because they enable one to realise whether the general provision of outdoor recreation resources for tourists is properly conserved and preserved for present and future generations. At this stage, it needs to be mentioned that the year-to-year population figures provided by the Sokhulu-KwaMbonambi authority through Statistic South Africa (SSA, 2007a, 2007b) were reconciled.

As has already been mentioned, the study area is made up of two coastal geographic areas: Sokhulu-KwaMbonambi Traditional Authorities and commercial plantations along the N2. KwaMbonambi is 8 145 hectares while Sokhulu is 14 877 hectares. The Statistic South Africa 2007 census data were used to analyse and interpret the demographic and the economic information existing (SSA, 2007a, 2007b). The distribution of population and household attribute was offered through the Statistic South Africa data sheet which describes the 2007 Community Survey of KwaZulu-Natal as well as the Community Survey and Basic Results of Municipalities in South Africa (SSA, 2007a, 2007b).

Table 3.1 below shows the population distribution and sizes of households in the study area.

TABLE 3.1: CENSUS DATA OF POPULATION AND HOUSEHOLDS IN THE STUDY AREA

Population	106,943
Households	20,437
Average Household Size	5,23

[Source: KwaMbonambi IDP (2007)]

The Table 3.1 shows that population densities in the study area vary from 0 to 800 people per km² with the average population density being less than 300 people per km². The population density and household attributes are further described in various tables and graphical representation in this section below. The emerging evidence is that people are generally settled in Traditional Authority Areas as well as in areas along the coast with Ward 2 of the KwaMbonambi Municipality being sparsely populated with people concentrated around the town of KwaMbonambi

3.4.2 Gender Distribution

What is shown in Table 3.2 is the distribution of data offered through Statistic South Africa census data and the KwaMbonambi Integrated Development Plan, also described in the 2007 Community Survey of KwaZulu-Natal (SSA, 2007a, 2007b). The gender breakdown data shows that there are more females [53%] than males [47%] in the study area. These figures also suggest that the sample data in the study would have to be dominated by females also.

3.4.3 Age Distribution

That which is shown in Table 3.2, is that the Statistic South Africa census data, which has been re-categorised or clustered to be similar to the surveyed data sample. The clusters have been grouped to youth group [0-19], the young adults [20-39], mature adults [40-59] and the old age group [60-80]. These categories have been designed to approximate the sample age distribution in the research survey. What is also evident is that there are more young people [54%] and young adults [27%] in the study area. The mature adults [40-59] are very few [13%] as well as the old age group [06%] being very few.

TABLE 3.2: DISTRIBUTION OF DEMOGRAPHIC CENSUS DATA IN THE STUDY AREA [STATISTICS SOUTH AFRICA]

CENSUS DATA CATEGORY	FIRST SUB-CATEGORY	SECOND-SUB CATEGORY	TOTAL
Gender	Female	53%	100%
	Males	47%	
Age	0-19	56909	54%
	20-39	29250	27%
	40-59	13961	13%
	60-80	6823	06%
Education Level	No Schooling	30%	100%
	Pre-Primary	22%	
	Primary Level	06%	
	Secondary	37%	
	Grade 12 Tertiary	13% 02%	
Employment	Employed	12013	41%
	Unemployed	17136	59%
Economically	Active	29149	49%
	Inactive	30540	51%

[Source KwaMbonambi IDP, 2007; SSA 2007a, 2007b].

3.4.4 Education Level

The Table above also depicts the levels of education among the community of the Maphelane-KwaMbonambi Municipality area in terms of percentages, derived from data from Statistics South Africa, Community Survey of 2007. The actual census data shows that about 37 percent of the people in the study area are in the Secondary education level, with only 13 percent having acquired matriculation or Grade 12. What is interesting is that about 30 percent of the inhabitants of Maphelane-KwaMbonambi Municipality area have no schooling experience. Fundamentally, this means that these people have not acquired any formal education.

3.4.5 Health Status and HIV/AIDS

The SSA census data does not have clear statistics which shows and can be used to determine the rate of HIV/AIDS infection in Maphelane-KwaMbonambi Municipality. As a result thereof, a national ratio of 1:4 people that are HIV positive is used. On this basis it is assumed that approximately 21 389 people are infected with HIV in the local population in terms of the 2007 census data, which is designated as 106 943 inhabitants in the study area.

3.4.6 Economic Indicators in the Area

Economics and related human activities are known to play a significant role in determining the effective performance of outdoor recreation facilities and activities in any recreation environment. It was then found necessary to establish the true nature of employment data and economic activity and non-economic activity in the study area.

a) *Employment and Economic Activity*

What is shown in Table 3.4 is that the majority [59%] of the people of Maphelane-KwaMbonambi Municipality are unemployed and only 41 percent employed. These SSA 2007 census data are consistently showing the same situation from many municipalities in KwaZulu-Natal. The high unemployment figures suggest that there is urgent need for job creation activities in the study area.

Relating to the economically active and non-activity status in the study area, the SSA 2007 census data shows that 51 percent of the people are economically in-active. On the other hand, 49 percent of people residing in Maphelane-KwaMbonambi Municipality are economically active. When we refer to Table 3.2, local people have no schooling at all. This is clearly related to high unemployment and economically inactive population in the study area.

TABLE 3.3: DISTRIBUTION OF SOCIO-ECONOMIC CENSUS DATA IN THE STUDY AREA [STATISTICS SOUTH AFRICA]

CENSUS DATA CATEGORY	FIRST SUB-CATEGORY	SECOND-SUB CATEGORY	TOTAL
Employment	Employed	12013	41%
	Unemployed	17136	59%
Economically	Active	29149	49%
	Inactive	30540	51%
Occupation	Professionals	1092	09%
	Clerks & Officials	2262	18%
	Skilled workers	2624	22%
	Unskilled workers	6037	51%
Employment Sectors	Agriculture	3002	25%
	Manufacturing	1617	13%
	Retail Trade	1859	16%
	Services	2443	20%
	Other Activities	3123	26%

[Source KwaMbonambi IDP, 2007; SSA 2007a, 2007b].

b) Occupation status

As shown in Table 3.4 the occupation profile of the people of Maphelane-KwaMbonambi Municipality, as presented by SSA 2007 Census data, are strong in the skilled and unskilled categories [73%]. There are relatively few professionals, clerks and officials [27%]. What is to be noted is that the distribution of occupation status is strongly affected by the low education levels, unemployment situation and many economically inactive population in the study area.

(c) Employment Sectors

Similar to the occupation sectors, the distribution of employment sectors are strongly influenced by the low education levels, unemployment situation and many economically inactive population in the study area. Many of the people in the study area are employed in the agricultural sector [25%], followed by the services sector [20%], which may obviously be formal and informal. A variety of smaller sectors have been clustered [26%] to constitute a number of activities that may also be formal and informal.

The agricultural sector where many people are employed is encouraged by the rural character of the study area and is predominantly shaped by long hours of work and low pay. The dominance of this sector can be partly attributed to low levels of education among the adult population in the KwaMbonambi Municipality, as it was shown earlier, and its labour intensive nature which enables it to absorb a large number of workers.

d) General Comment

Economic activity in the KwaMbonambi Municipality area is predominantly in the agricultural and mining sectors. Agriculture includes the Sappi and Mondi timber plantations around KwaMbonambi as well as commercial sugarcane and banana farming around KwaMbonambi and Umfolozi Flats.

Mining is done by Richards Bay Minerals (RBM) which mines along the coastal dunes of the KwaMbonambi and KwaSokhulu Traditional areas.

The KwaMbonambi and KwaSokhulu traditional areas have a high agricultural potential, but due to traditional settlement patterns, customs, and the forced relocation of some communities, agricultural activity remains at low intensity. The area straddling the N2 is intensively farmed by Mondi and Sappi and private farmers thus taking advantage of the area's high agriculture potential. Rainfall patterns alter drastically from the east (the coast) to the west (inland). Rainfall is lower in the inland than along the coast, as a result the agricultural potential of the Mhlana area is lower. This situation can, however, be remedied to an extent by the introduction of sound agricultural management and irrigation in the Mhlana area.

3.5 OUTDOOR RECREATION RESOURCES IN THE MNR

Resources are the building blocks of development. Through a process of appropriate development, natural or cultural resources are converted into attraction for the use of recreators and others. Resources are of two types: Renewable and non-renewable. Renewable coastal resources are natural and human-produced goods and services that are either dependent on the coast for their existence or whose value is considerably enhanced by their location at the coast. Non-renewable resources, on the other hand, are not generated or reformed in nature at rates equivalent to the rate at which they are used, for example, petroleum (Pigram, 1983).

3.5.1 Importance of Natural Resources

A significant portion of the study area falls within a public protected area that has been set aside for conservation, ecotourism, farming and hunting. Within the protected area, environmental integrity is generally well conserved with

development being controlled to mitigate visual impact. This is an aspect, however, which requires constant vigilance in the face of increasing demand for the generation of higher income through tourism. The study area is a small protected area about 1 129 hectares and is linear in nature. Resources fall into three categories, that is: Natural Resources; Man-made Resources and Socio-cultural Resources [Pigram, 1983; <http://www.stlucia.co.za/info.htm>. (2009)].

Natural Resources include the following:

- Water based that is beaches, river lakes, marine (interstitial and sub-tidal communities)
- Land based that include flora and fauna, game and nature reserve, mountains, coastal forests and forests as well as vegetated dunes.

3.5.2 Significance of Sand Dunes

The study area as a mountain is easily defined since mountains are defined in terms of their absolute and relative height. This is arbitrary because such categorization depends on the area being studied. What would be described as a high sand dune in Australia would not be necessarily so in South Africa. Likewise South Africa may not be described as having high sand dunes compared to Australia.

Sand dunes have significant aesthetic, cultural, geographic and spiritual values. According to Patmore & Glyptis (1979) sand dunes are ecologically sensitive areas and are given to gradually become rising landforms which culminate in rolling hills and valleys. It is at this point where it has been fully developed that it becomes an attraction visited more by tourists and recreators than by local inhabitants of Maphelane-KwaMbonambi, St. Lucia and Sokhulu areas. In the field of recreation terms like mountains, hills and

plains have a sense of space which is in contrast with most outdoor recreation resources found in urban environments.

These sand dunes are covered with indigenous forests. Within this unique habitat occurs a variety of birds, monkeys, reptiles, squirrels, antelopes and insects. Visitors can access this area by utilizing guided safaris or take self-guided walks. Beneath this unique eco-system lie huge mineral deposits. These minerals were originally eroded from the majestic Drakensberg range of mountains and transported hundreds of kilometres to the coast. Upon reaching the Indian Ocean they were washed north and blown on-shore by the prevalent on-shore winds. This phenomenon can still be witnessed today where black patches of sand pattern the beach. It is not oil, but mineral rich sand. These result in the enhancement of KwaZulu-Natal as a tourist attraction (KwaMbonambi IDP, 2007).

FIGURE 3.2 THE MAPHELANE SAND DUNES



[Source: KwaMbonambi IDP, 2007]

In an effort to conserve the place and to preserve natural resources the KwaZulu-Natal Nature Conservation Service (KZN-NCS), now popularly known as Ezemvelo KwaZulu-Natal Wildlife, involves communities in responsible management of their environmental heritages. Some of the most important recreational activities in the study area include sightseeing, camping, picnicking, self-guided walks, trail fishing and swimming.

3.5.3 Vegetation and Mammals

As has already been mentioned, the study area is full of indigenous forests. It is also characterised by lush vegetation and is rich in geomorphic features. Climatic conditions support exceptional ecological and biological diversity. The distribution of vegetation is largely dependent on topography, moisture regimes and other regular conditions that make a reserve a primary nature conservation site. The conservation system functions almost impeccably. The Maphelane Nature Reserve is a rich picture of swamp forests, forested sand dunes, riverine woodlands, freshwater reed, grassland low-lying, the sand with its uniquely mineral salt as well as hygrophilous and floodplain sedge swamps (Encyclopaedia of Earth, 2008). It is the responsibility of the Ezemvelo KwaZulu-Natal Wildlife to optimally conserve and preserve these natural resources. Management authorities and recreators should do their utmost to save a lot of endangered species from extinction.

Forest types to be found in the Maphelane-KwaMbonambi area, include swamp forests which are rare in South Africa. Dominant among the total vegetation are *ficus tricopoda* as well as *hygrophilous* and Barrington forests which occupy 3 095 hectares, that is, 65% of the South African total land-space covered in forests. These occur on organic soils in hypo-saline drainage lines and marshes around freshwater lakes usually flooded with slow-flowing water after rains; mangroves dominated by *bruguieria*

gymnorhiza and *avicennia marina*; the uniquely well-developed coastal dune forest (*mimusops caffre*, *grewia occidentalis*, *psychotria capensis*) which can reach heights of 30 metres with a dense shrub layer with many lianas; sand forest on relict dunes of highly-leached sands; coastal lowland forest growing to heights of 30m on highly leached sands (*strychnos decussate*); and plantations of *pinus elliottii* [DMP, 2002; <http://www.kznpark.com/accommodation/maphelane/kwazulunatal.aspx>. (2009)].

In the marine flora, 352 species of seaweeds have been recorded in the Maphelane-KwaMbonambi area. That makes nearly 78% of the total seaweeds of the KwaZulu-Natal coastline. A new species, *cellophycus condominiumius*, and a parasitic red alga, *calocopsis smithenae*, have recently been found. Beds of kelp *ecklonia biruncinata* have also been identified deep in submarine canyons (DMP, 2002).

The study area is also home to larger off-shore marine mammals. These include the following: (DMP, 2002).

- marine turtles, viz. turtle green, turtle leatherback and turtle loggerhead,
- marine fish such as sharks (blacktip, milk, sandbar, scalloped, hammerhead, spotted ragged tooth, tiger) and whales,
- Wetland mammals such as the wetland reptiles, e.g. izimbaza,
- Sea-shore and marine birds (DMP, 2002).

3.5.4 Water resources

Water resources include large water bodies such as rivers, estuaries, lakes and the sea. Water as an outdoor recreation resource is used by recreators for a variety of activities such as sailing, water skiing, surfing, boating, boat

fishing and swimming. Water resource is also habitat to different animals such as hippopotamus, crocodiles, fishes and water birds (Mwandla, 2002).

FIGURE 3.3 WATER RESOURCE: SHELL FISH (*IZIMBAZA*)



[Source: KwaMbonambi IDP, 2007]

Water resources in the Maphelane-KwaMbonambi area are the cornerstone of outdoor recreation facilities and related activities, as well as the natural habitat of various species of biotic mammal and creatures. For example, in some rocky intertidal areas, offer excellent mussels and crayfish habitats, which are a marvel to many recreators and tourists visiting the Maphelane-KwaMbonambi area. Many people are allowed to harvest shellfish on the rocks [Refer to Figure 3.4], (called *izimbaza* in Zulu) under permit conditions. The bay in the Maphelane-KwaMbonambi environment, is wonderful for swimming, although, there are no sharks net. The local community do harvest crayfish for their own subsistence purposes.

It is important to understand that the water resources in the Maphelane-KwaMbonambi area, also include wetland systems or resources. According

to the DEAT report (DEAT, 2006) a wetland can be regarded as land that is transitional between terrestrial and aquatic systems, where the land is periodically covered with shallow water or where the water table is at or near the surface, in normal circumstances. What is interesting to note is that the wetland areas in Maphelane are far more water drenched than many other wetland in KwaZulu-Natal.

FIGURE 3.4 WETLAND AS A RESOURCE



[Source: KwaMbonambi IDP, 2007]

The Figure 3.5 above depicts one of the wetland features available in the Maphelane-KwaMbonambi environment. This wetland area is a popular habitat or home for different water animal species. These are animals such as frogs, fishes, crocodiles and hippopotamuses. During the day, these animals cool their bodies in water and at night they look for food outside the water. Birds have also made their nest on top of these resources as home and get water resource nearby. Some international birds travelling long distances.

between the northern and southern hemispheres have been known to settle in such wetlands.

3.5.5 Land-use and Management

The Maphelane-KwaMbonambi environment as the study area is mainly used for diverse purposes, such as residence, farming, conservation (as a nature reserve), commerce and recreation [Refer to Figure 3.6]. The land that is used for formal recreation purposes is under the direct management of parastatal organisations such as the Ezemvelo KwaZulu-Natal Wildlife and iSimangaliso Wetland Park Authority. These organisations facilitate in keeping the natural resources and man-made facilities in good condition. It is therefore, imperative that the Maphelane Nature Reserve be managed in an efficient manner.

FIGURE 3.5: THE FOREST ENVIRONMENT IN THE MNR



[Source: KwaMbonambi IDP, 2007]

The land-use typical characteristics, such conservation, agriculture, water resources, settlements and outdoor recreation, facilitate the carrying or establishment of integrated environmental systems. The latter is important for running or managing the nature resources in the study area in an integrated and efficient manner, so the sustainability could be entrenched in the study area. An efficient and strong management team to direct and run activities in the reserve are therefore a prerequisite to the area. In terms of its long-standing function, Ezemvelo KwaZulu-Natal Wildlife is responsible for ensuring that, among other things, outdoor recreation resources are managed in a sustainable way for present and future generations [<http://www.kznwildlife.com>. (2007)].

3.6 CONCLUSION

The study area can be regarded as an important terrestrial and coastal/marine ecosystem, which makes the outdoor recreation facilities and activities to flourish for all stakeholders. It is for this reason that the management of human-use of the biosphere should yield the greatest benefits for the present inhabitants and future generations. As mentioned earlier, integrated resource management is very important as it enhances sustainable recreation development in the area. Failure to address the question of sustainable use of natural resources could degrade the resource-base on which the area depends. It follows also that the volume of recreators and tourists visiting or staying in the area must be carefully controlled to avoid damage to the environment.

This chapter has attempted to highlight the principles, concepts and management systems that would facilitate the investigation and operation of outdoor recreation resources in the Maphelane-KwaMbonambi environment. The chapter also attempted to establish the management strategies in place

towards promoting outdoor recreation resources. The approach used to establish the nature of the research problem was obviously to examine theoretical basis of the arguments in chapter two, to reveal the physical setting of various features and processes in this chapter and to engage in the analysis of collected statistical data in the next chapter. It is believed that through the information received from the Maphelane-KwaMbonambi environment, the study would be able to resolve the research statement or problem and bring about new and innovative findings and recommendations for this study.

CHAPTER 4

ANALYSIS AND INTERPRETATION OF DATA

4.1 INTRODUCTION

The foregoing four chapters have dealt with the outline of the study, its objectives and hypotheses as well as its theoretical underpinnings. More specifically, chapter 1 was designated as the Orientation of the Study; Chapter 2, Theoretical Framework; and Chapter 3, the Physical Setting of the study. In essence, the objective of this chapter is to explore and present findings relating to the survey that was conducted. In this chapter, data were collected, presented in statement form, frequencies and graphical representation. The data were then analysed and the findings yielded a variety of interpretations. These interpretations assisted in addressing the research questions related to unanswered study-area questions as well as addressing existing gaps in this research investigation.

According to Magi (2007), it is important to indicate that the analysis of data does not in itself provide answers to research questions, but interpretation of the data does go a long way towards providing a clearer picture. "Essentially, interpretation converts the results of analysis and makes inferences about the various section of research design" (Magi, 2007: 127). The main purpose of this section is to convert data into an intelligible and interpretable form, more specifically in addressing how the local community perceives the management strategies for outdoor recreation resources around the Maphelane Nature Reserve, also called Maphelane-KwaMbonambi.

To place this chapter in the context of the objectives of the study, it is essential to restate them for the purpose of reminding ourselves. The objectives are expressed in relation to the hypotheses postulated for this study.

4.2. RESTATEMENT OF OBJECTIVES AND HYPOTHESES

The main purpose of the study was to provide valuable data about the perceived management strategies for outdoor recreation resources and natural recreation resources around the Maphelane Nature Reserve. The study attempts to provide information about how stakeholders and the community perceive the management of outdoor recreation resources. To carry out the intentions of the research, the following objectives and hypotheses were restated:

OBJECTIVE 1: To find out the extent to which the Maphelane community understands meaning and importance of outdoor recreation resources.

HYPOTHESIS 1: That the Maphelane community has good understanding of the meaning and importance of outdoor recreation resources.

OBJECTIVE 2: To establish the types of recreation facilities and activities which are existing and available in the study area.

HYPOTHESIS 2: That the recreation facilities and service are available in the study area.

OBJECTIVE 3: To reveal the participation patterns of the respondents in outdoor recreation facilities and activities in the study area

HYPOTHESIS 3: That the participation patterns of the respondents in outdoor recreation facilities and activities are inadequate in the study area.

OBJECTIVE 4: To identify the outdoor recreation management practices, which are carried out in the study area.

HYPOTHESIS 4: That the outdoor recreation management and practices are carried out in the study area.

OBJECTIVE 5: To determine the outdoor recreation benefits that are available for the community as a whole in the study area.

HYPOTHESIS 5: That the outdoor recreation benefits as well as community beneficiation are not available for communities.

4.3 DEMOGRAPHIC CHARACTERISTICS OF RESPONDENT

The population of KwaMbonambi and KwaSokhulu has played an important role in the analysis of the study because it enables one to realise whether the general provision of outdoor recreation resources for tourists is properly used, conserved and managed for present and future generations. At this stage, it needs to be mentioned that the year-to-year population figures provided by the KwaMbonambi Integrated Development Plan are not reconcilable with what the local community believes. It has already been mentioned, that the study area is made up of two coastal geographic areas, the KwaSokhulu-KwaMbonambi Traditional Authorities and the commercial plantations organisations along the N2. These two rural and traditional community areas have provided the basis upon which various attributes in the

study area are analysed. Some of these attributes relate to: understanding the meaning and importance of outdoor recreation resources; the existing types of recreation facilities and activities; recreation participation patterns; outdoor recreation management practices in the study area; and outdoor recreation benefits that are available for the local community.

The stakeholders from whom the research data was collected consisted of various categories and emerged from various areas of Maphelane-KwaMbonambi. The participating respondents varied in terms of, gender, age and marital status [see Table 4.1]. In addition, socio-demographic variables such as education qualifications and occupation are dealt with in Table 4.2 later.

4.3.1 Demographic Attributes

What is evident in Table 4.1, in the next page, is that one hundred and twenty seven (127) respondents participated in the research study. When one looks at these demographic and socio-economic variables, it becomes evident that these influence the various statements that are investigated. These statements include: understanding, utilisation, participation, management and beneficiation.

As indicated earlier, the research methodology used in the analysis of the data involved the usage of 127 respondents, who were categorised in terms of 12 outdoor recreation officials, 19 tourists, 15 tour operators and 81 local community members. The variables of gender, age and marital status were analysed and cross-tabulated in terms of the corresponding stakeholders. It should be noted that not all variables were responded to. For example, tourists were reluctant to respond to local issues because they saw themselves

as visitors to the study area. On the other hand, local residents, communities, service providers and officials were keen to participate and featured in all questions.

TABLE 4.1: DISTRIBUTION OF DEMOGRAPHIC CHARACTERISTICS

VARIABLE	SUB-VARIABLE	TOURISTS n=19		OFFICIALS n=12		SERVICE PROVIDERS n=15		LOCAL COMMUNITY n=81	
		Freq	%	Freq	%	Freq	%	Freq	%
Gender	Males	09	45%	07	58%	07	46%	28	34%
	Females	10	55%	05	42%	08	54%	53	66%
Age	15-20	00	00%	00	00%	01	04%	16	20%
	21-35	06	30%	03	28%	05	34%	18	22%
	36-50	10	52%	06	52%	08	58%	24	30%
	51-80	09	18%	03	20%	01	04%	23	28%
Marital Status	Married	11	55%	07	60%	07	47%	34	42%
	Single	08	44%	05	38%	07	48%	43	53%
	Divorced	00	00%	00	02%	01	05%	04	05%
	Widowed	00	00%	00	00%	00	00%	00	00%

[n = 127. Some of the subjects gave more than one response for each sub-variable]

(a) Gender Variable

The distribution of gender among the local communities revealed that about 66 percent of respondents were females and 34 percents being males. This distribution confirms that females are in the majority in rural areas and that there were more females who were prepared to participate in the investigation. In rural and semi-rural areas of KwaZulu-Natal females generally dominate these places. Not only were the males fewer who were ready to respond to the survey in the Maphelane-KwaMbonambi environment, they were also less eager to participate or respond to the questionnaire than females. In other words, though most respondents were available for the interviews, females tended to dominate the survey response process. Thus, a general statement could be made that females were the most responsive during the survey.

The category of service providers revealed responses that show that 54 percent of the respondents were females and 46 percent male. It should be remembered that many of the service providers had much interest in the area for commercial reasons. The above response is diametrically opposite to that of officials, because the majority of officials were males [58%]. The main reason for the response being that the Maphelane-KwaMbonambi environment is still male-dominated.

What is interesting is that among the tourists, there is an even-split among the respondents who participated in the survey. There were 52 percent females and 48 percent males who eventually took part in the survey.

(b) Age Variable

Table 4.1 also represents age groups in terms of frequency and percentage who participated in the Maphelane-KwaMbonambi investigation. The age distribution revealed that the outcomes were biased towards the more mature age groups. More specifically, the middle aged group (36-50) were in the majority in all instances in terms of responding to the questionnaire. The community cluster was dominated by the middle aged group (36-50) and the second largest in response [28%] was the senior adult group (51-80). An average of 21 percent of the community-respondents was to be found among the young people (15-20) and (21-35) who responded to the questionnaire.

It must be remembered that age as a variable has an important influence on recreation and tourism leisure participation and utilisation of facilities. Torkildsen (2005) has argued that the effect of age vary depending on the person and the type of activity. An investigation into the age structure of the population sectors is aimed at revealing the type of recreators that frequently patronise natural recreation resources as well as the experiences of officials

and private sector individuals and groups. Clearly the officials with long service and service providers who have owned businesses for a long time have better knowledge of the nature reserve than their counterparts who have been in the recreation industry for a short period of time.

The age variable also had a concentration of respondents among the middle-aged group such as tourists [52%], the officials [52%] and service providers [58%]. The period of service of officials also suggests that officials are not likely to adapt to new situations. It should be pointed out, however, that the experiences of the officials with long service standing could turn out to be valuable if their ideas are considered in the development and promotion of transformed recreation management practices.

(c) Marital Status Variable

As shown in Table 4.1 the marital status of respondents indicated that an average of 51 percent of the respondents in this research study were married. The single sub-variable [46%] was found to be the second largest group of respondents. The researcher was very much interested to establish whether the marital status variable has a role to play in influencing recreation management, participation and utilisation.

Marital Status	Married	11	55%	07	60%	07	47%	34	42%
	Single	08	44%	05	38%	07	48%	43	53%
	Divorced	00	00%	00	02%	01	05%	04	05%
	Widowed	00	00%	00	00%	00	00%	00	00%

Sub-variables such as divorced [mean of 3%] and widowed [00%] were found to be insignificantly represented in the study area. In the light of the above analysis, it would be interesting to find out if marital status as a variable has an influence on how respondents see and understand the meaning and importance of outdoor recreation resource in the study area.

4.3.2 Socio-economic Variables

It was intimated in the earlier section that there were socio-demographic variables such as education qualifications and occupation that were analysed in the Maphelane-KwaMbonambi study area. In this section the participation of respondents, shown in Table 4.2, is analysed in terms of education and occupation variables. When one looks at these socio-economic variables, it becomes evident that these influence the various statements that are investigated. These statements include: understanding, utilisation, participation, management and beneficiation.

TABLE 4.2: DISTRIBUTION OF SOCIO-ECONOMIC CHARACTERISTICS

VARIA- BLE	SUB- VARIABLE	TOURISTS n=19		OFFICIALS n=12		SERVICE PROVIDERS n=15		LOCAL COMMUNITY n=81	
		Freq	%	Freq	%	Freq	%	Freq	%
Education	No Schooling	00	00%	00	00%	00	00%	08	10%
	Primary Sch.	02	11%	01	05%	05	34%	32	39%
	Secondary Sch.	12	63%	08	66%	09	57%	34	42%
	Tertiary Qualif.	05	26%	03	29%	01	08%	07	09%
Occupation	Professional	09	48%	04	33%	03	18%	09	11%
	Skilled	06	32%	06	54%	05	34%	24	30%
	Semi-skilled	02	12%	02	13%	03	20%	16	20%
	Unskilled	02	08%	00	00%	03	19%	23	28%
	Unemployed	00	00%	00	00%	01	09%	09	11%

[n = 127. Some of the subjects gave more than one response for each sub-variable]

(a) **Education Variable**

The table above represents level of education in frequency and percentage. The level of education for every resident measures the standard of knowledge, capacity to serve, quality of services delivery and the economic capacity of the community. Education is an important factor to consider throughout the development processes as it affects quality of service delivery and management processes of the reserve. The research study [Maphelane-

KwaMbonambi] shown in Chapter 3 (KwaMbonambi IDP, 2009), indicated that the Maphelane residents alone indicated that 27 percent of them had acquired secondary education, whilst about 22 percent have primary education. At post matriculation, about 13 percent had passed matriculation and only 2 percent had tertiary or university education.

On the basis of the results of the survey or research investigation, shown in Table 4.2, they indicate that the majority of respondents have secondary school qualifications. It is also worth noting that the tourists have secondary education [63%], whilst 26 percent have tertiary education. About 66 percent of the officials have secondary education and 29 percent have tertiary education. Interestingly, about 57 percent of the service providers have secondary education and 34 percent have primary education. Similarly, about 42 percent of the local community members have secondary education and 39 percent have primary education. The bias towards secondary education is consistent for all groups, yet the community and service providers feature significantly at the primary level. It may be argued that these apparent levels of education would augur well for respondents making judgements about the perceived nature of outdoor recreation resources in terms of the various research objectives and problem statement.

(b) Occupation Variable

As intimated in the theoretical background section of this dissertation, demographic variables such as education, occupation and income levels can be regarded as having a substantial influence on recreation and tourism understanding, utilisation, participation and management practices (Bennett, 2002; Torkildsen, 2005; Magi & Nzama 2009a, 2009b). In this context it may be mentioned that occupation and related earnings influence the quality of life, recreation lifestyle, and other related factors.

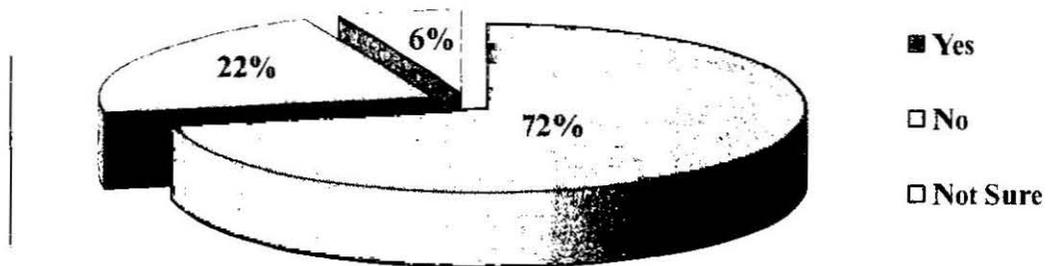
The data analysis in Table 4.2 revealed that the majority of tourist respondents [48%] were in the professional occupation category, whereas about 32 percent of them were skilled employees. On the other hand, the majority of officials [54%] were categorised as skilled workers and 33 percent of them were classified as professionals. A further significant number of respondents in the service provider and community categories were differently classified. About 34 percent of the service providers were categorised as skilled and 20 percent of them were regarded as semi-skilled. Similarly, about 30 percent of the local community members categorised as skilled and about 28 percent were classified as unskilled. A significant number of community respondents (11%) indicated that they were unemployed. These unemployment values suggest that there is a dire need for the local communities to benefit from the recreation and tourism industry. What was observed in the study area is that there were many Black people who were engaged in small and micro enterprises as well as unemployed, as compared to the other populations groups.

4.4 UNDERSTANDING THE MEANING AND IMPORTANCE OF OUTDOOR RECREATION RESOURCES

It is essential to know the kind of outdoor recreation resources available in the study area in which the local residents participate. The local community members, as part of the respondents, were asked if they understand the meaning and value of outdoor recreation resources. With this question, the researcher wanted to find out if the residents have knowledge and awareness of the natural outdoor recreation resources that the international and domestic tourists tend to use during their leisure time. The general responses as shown in Figure 4.1, indicate that 72% of the respondents understood the meaning

and importance of outdoor recreation resources. Only 22 percent of the respondents indicated that they did not understand the meaning and importance of outdoor recreation resources.

FIGURE 4.1: UNDERSTANDING THE MEANING AND IMPORTANCE OF OUTDOOR RECREATION RESOURCES



According to Paul, *et al.*, (2004) the key challenge of destination management in protected areas is to respond appropriately to the trends in tourism and recreation without losing the best of old and without disrupting the varied resident communities of the area. These communities in recent times are living in protected areas, long before they had acquired the existing status of permanency in the residential areas. It should be understood that in order for outdoor recreation to prosper then recreation understanding and its importance ought to be supported, so as to promote good recreation management and delivery. As such, outdoor recreation understanding is an important factor that plays a role in recreation and tourism development.

Following from the outcomes of the analyses carried out in this section, it stands to reason that Hypothesis 1, which states: *That the Maphelane community fully understands the meaning and importance of outdoor recreation resources*, should be supported. The basis for this conclusion is

that the majority respondents fully understand the importance of outdoor recreation for purposes of strengthening the industry in the study area.

4.5 OUTDOOR RECREATION FACILITIES AND SERVICES EXISTING IN THE STUDY AREA.

The utilisation and appreciation of outdoor recreation is dependent on the good management of such resources, such that there should be relevant communication and accessibility around the facilities. For example, effective marketing of the facilities makes them to be better known in the local areas and faraway places. The major challenge to effective outdoor recreation management in protected areas is to respond appropriately to new trends in recreation and tourism. This approach can be achieved by allowing the indigenous people of the area to acquire other suitable vacant area in the study area.

The number of people who responded to the matter relating to the use of outdoor recreation facilities constitutes a significant and representative sample size. The attitude towards the management of natural recreation resources influences the levels of good utilisation of facilities and activities in any study area. In the Maphelane-KwaMbonambi area, specifically, there are people who live in poverty and think only about satisfying basic needs and not about the management of natural resources available in the reserve.

4.5.1 Visitation to Outdoor Recreation Facilities

There are a substantial number of outdoor recreation facilities that are available and visited in the study area, designated as the Maphelane-KwaMbonambi environment. Some of the random facilities to be found in the area include the following: natural forests; game sites, fishing areas;

swimming areas; beach areas; camping sites; picnic area; water-skiing area; surfing areas; boating areas; bird watching area and several other facilities.

Despite the fact that in some places in KwaZulu-Natal, there is a substantial number of outdoor recreation resources available, there appears to be low levels of participation or visitation to these recreation facilities. A typical example of such places is the Maphelane-KwaMbonambi environment, where the Maphelane Nature Reserve is located. The local community's participation practice in these places may be solely to work and perform low-keyed tasks assigned to them by the employer-authorities. In the context of the Maphelane-KwaMbonambi natural area, the respondents were asked to indicate their level of visiting the recreation facilities [Refer to Table 4.3]. Initially respondents were asked to reveal and rank a list of outdoor recreation facilities they visited in the study area.

TABLE 4.3 RANKED RECREATION FACILITIES VISITED BY RESPONDENTS

RANK	FACILTIES VISITED	ABSOLUTE FREQUENCY	FREQUENCY PERCENTAGE
01.	Beach areas	91	72%
02.	Swimming areas	89	70%
03.	Picnic areas	87	68%
04.	Camp sites	83	65%
05.	Fishing area	81	64%
06.	Game sites	77	61%
07.	Water-sports area	70	55%
08.	Natural forest area	63	50%
09.	Boating areas	58	46%
10.	Other facilities	56	44%

[n = 127. Some of the subjects gave more than one response for facilities]

The majority of respondents, ranking highest, indicated that they visited and participated in facilities such as the beach [72%] and swimming areas [70%]. The main reason for visiting these facilities is that they were free for most individuals. The second cluster of facilities visited by about 61% to 68% of the respondents, included picnic areas [68%]; camping sites [65%]; fishing areas [64%] and game sites [61%]. The main reasons for visiting these facilities were that these facilities were preferred by family and many recreators and that these were seen as basic recreation or leisure facilities by tourists.

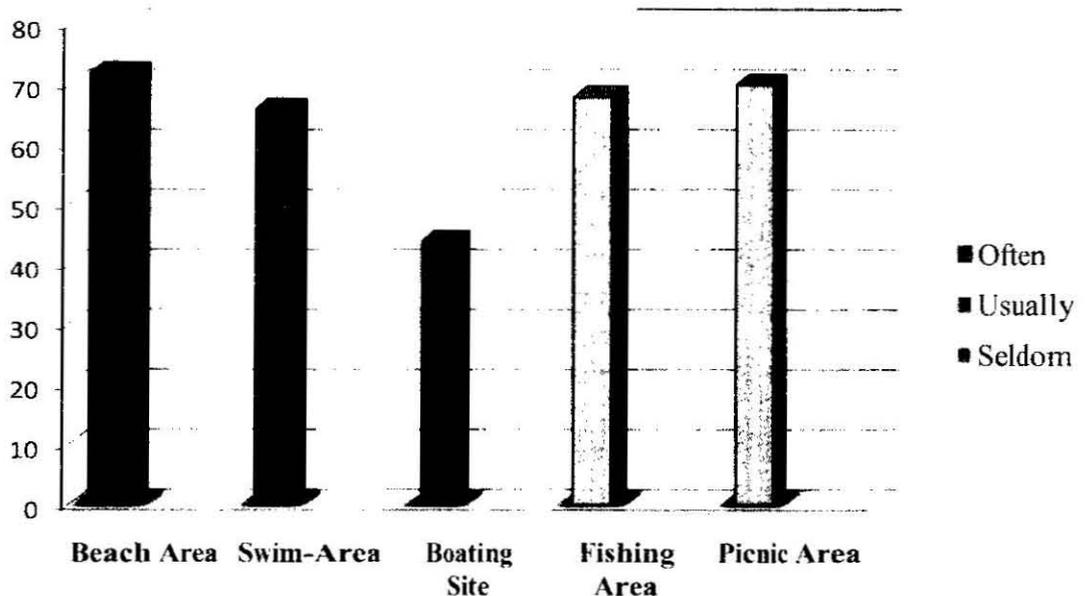
The facilities that were less popular and ranked lowest around 50% and 40% included the water-sports area, natural forest area, boating area and other facilities. The low-ranking position of these facilities was influenced by the fact that they were expensive to acquire and require a significant financial outlay to be participated in.

The analysis given above indicates that the respondents are somewhat familiar with the main outdoor recreation facilities in the study area. It may be concluded that Hypothesis 2, which states: *That the respondents are familiar with the types of outdoor recreation facilities and services which are existing and available in the study area*, should be supported. The basis for this support is that a significant number of respondents selected and ranked high many of the facilities associated with outdoor recreation in the Maphelane-KwaMbonambi environment.

The respondents in the Maphelane-KwaMbonambi environment were also requested to indicate the extent to which they visited the facilities ranked above. The respondents were asked to reveal the frequency of occasions they visited the recreation facilities. What is shown in Figure 4.2 is that the

respondents described their frequency of visit to the beach area and swimming areas as 'often'.

FIGURE 4.2: FREQUENCY OF VISITING SOME RECREATION FACILITIES IN PERCENTAGE



On the other hand, the respondents described their frequency of visit to the camping area and fishing areas as 'usually', lower than the previous recreation facilities. Finally, the respondents described their frequency of visit to the boating area as 'seldom'. The main reason for this response is that many of the community members are poor and do not have expensive facilities such as boats for recreating.

When considering the frequency of visiting some of the main recreation facilities in the study area, it can similarly be concluded that Hypothesis 2, which states: *That the respondents are familiar with the types of outdoor recreation facilities and services which are existing and available in the*

study area, should be supported. The basis for this conclusion is that the few recreation facilities were supported by the majority of respondents in the Maphelane-KwaMbonambi environment

4.5.2 Perceived Outdoor Recreation Activities in the Area

Similar to the analysis of the existence and ranking of outdoor recreation facilities in the study area, the respondents were also asked to reveal the types of recreation activities available in the Maphelane-KwaMbonambi area. The activities analysed were largely associated with the outdoor recreation facilities discussed in the previous section. Some of these activities are directly or indirectly linked to the following: nature drives and trails; forest-walks; game viewing; fishing; swimming; beach-walks; camping; picnicking; water-skiing; surfing; boating or canoeing; bird watching; and several other activities.

Some of the few recreation activities from the list given above were analysed in terms of participation and familiarity among the recreators and tourists in the study area. To facilitate responses to determine the types of recreation activities that are available and patronised in the study area, the respondents gave responses which are reflected in Table 4.4. The presented list of activities was extracted from a number of activities given to respondents. In other words, a list of possible recreation activities was made available to choose from. The selections that were made indicate the types of recreation activities offered in the Maphelane area. What is also shown in Table 4.4 is not the only available recreation activities in the Maphelane-KwaMbonambi area, but how these are ranked by the respondents in the area. The outcome of the results is reflected in Table 4.4.

**TABLE 4.4 RANKED RECREATION ACTIVITIES IN THE
MAPHELANE-KWAMBONAMBI AREA.**

RANK	ACTIVITIES VISITED	ABSOLUTE FREQUENCY	FREQUENCY PERCENTAGE
01.	Game and Bird watching	89	70%
02.	Nature Trails and Walks	81	64%
03.	Water-sport [surfing, skiing, etc	79	62%
04.	Swimming	76	60%
05.	Mountain and Dune climbing	74	59%
06.	Beach walking	73	58%
07.	Fishing and Angling	70	55%
08.	Boating and Canoeing	61	48%
09.	Camping and Picnicking	58	46%
10.	Other facilities	51	39%

[n = 127. Some of the subjects gave more than one response for facilities]

The majority of respondents [70%] percent selected and ranked highest the game and bird-watching activities. The nature trails and walks were ranked second [64%] in the list of recreation activities. The Water-sport such as surfing, skiing, diving, and so on, was ranked third [62%] etc as recreation activities. Swimming [60%] was ranked fourth and not far away from water sport activities. The next activities such as mountain and dune climbing, beach walking, fishing and angling were all within 50% range. What is interesting is that the fishing has ranked rather lowly, because the government and conservation authorities have banned the use of 4x4 vehicles in the coastal area for the sake of safety of sea animals. This is despite the fact that fishing is regarded as a subsistence commodity, that is fishing in order to support families, as well as recreation

Finally, activities such as boating and canoeing as well as camping and picnicking were ranked lowest. The main reason for this is that some of

these activities require financial outlay in order to be participated in, by the local communities and the respondents in general.

Similar to the previous analyses on outdoor recreation facilities, it follows that this analysis on activities is seen as interrelated. It can therefore be similarly concluded that Hypothesis 2, which states: *That the respondents are familiar with the types of outdoor recreation facilities and services which are existing and available in the study area*, should be supported. The basis for this conclusion is that several recreation activities were well recognised by many of the respondents in the Maphelane-KwaMbonambi area.

4.6 PARTICIPATION PATTERNS IN OUTDOOR RECREATION FACILITIES AND ACTIVITIES

It should be remembered that participation patterns related to outdoor recreation resources help us to determine and understand the effective use and the management of recreation facilities and activities. One of the objectives of the study sought to establish how the participation patterns of the respondents influence the quality of recreation facilities and activities in the study area.

For the purpose of analysing the participation patterns of recreation facilities and activities in the study, the respondents were asked to identify some recreation and tourism programmes that promote the development and effectiveness of recreation facilities and activities. The respondents were given a set of preselected recreation programmes and asked to link these with what they thought was effective recreation delivery. Some of these recreation programmes relate to conservation, sustainability, transportation,

accommodation, recreation education, nature trails, cultural day and heritage day.

TABLE 4.5 PERCEIVED RECREATION PROGRAMMES THAT PROMOTE RECREATION DELIVERY [RANKED]

RANK	PROGRAMME	ABSOLUTE FREQUENCY	FREQUENCY PERCENTAGE
01.	Arts, Handicraft and Beadwork	81	64%
02.	Arbour Day & Heritage Day Activities	79	62%
03.	Fishing [Coastal, River & Deep-sea]	77	61%
04.	Cultural Day	74	59%
05.	Conservation [Nature Trails]	58	46%
06.	Accommodation [Hospitality]	57	45%
07.	Water-sport & Swimming	56	44%
08.	Nature Trails and Viewing	51	40%
09.	Boating and Canoeing	48	38%
10.	Camping and Picnicking	44	35%

[n = 127. Some of the subjects gave more than one response for facilities]

As shown in Table 4.5 above, the majority of respondents [64%] perceived the recreation programmes that promote recreation delivery to be facilitated by the arts, handicraft and beadwork programme available in the study area. Ranked second is the Arbour Day & Heritage Day Activities programmes which scored 62 percent. Still at the 60 percent category, the fishing [Coastal, River & Deep-sea] was ranked third and the first true outdoor recreation related programme. On other hand, programmes in accommodation, hospitality, and boating and canoeing showed a relatively low response. The programmes are important because the study area is located in a deep rural area, where most of the local people in such areas do not involve themselves in activities that do not benefit their families in a practical manner. The local community only prefer to engage in recreation

programmes that are directly benefiting them economically. It is for this reason that the main recreation programme in which respondents engage in are the Arts, Handicraft and Beadwork, which are known to generate salaries or earning for families. A significant number of respondents [61%] perceived the programme in fishing as related to recreation delivery and promotion.

On the basis of the outcomes of these analyses, it may be concluded that Hypothesis 3, which state: *That the participation patterns of the respondents in outdoor recreation facilities and activities are inadequate in the study area*, should be supported and accepted. The basis for this conclusion is that many of the respondents have not selected outdoor recreation resources or nature based resources, but more human and cultural activities, such as the arts, handicraft and beadwork, Arbour Day and Heritage Day Activities as well as the Cultural Day.

4.7 OUTDOOR RECREATION MANAGEMENT PRACTICES IN THE STUDY AREA.

Outdoor recreation management practices and strategy are the fundamental instruments that decision-makers and authorities utilise to try and improve the quality of life of local communities. The post-apartheid recreation and tourism policies in South Africa have served as an action plan in the management and promotion of recreation facilities and activities. According to Lubbe (2003) the laws, rules and regulations assist individuals and organisations to perform and act in socially acceptable ways, while policies serve as a set of accepted principles and plans constituting a programme of action in the management of affairs. In South Africa, recreation and tourism policies and strategies exist at national, provincial and local levels. All these

levels seek to put in place mechanisms for promoting, developing and facilitating recreation delivery in the entire country (Magi & Nzama, 2009b).

In all national situations, the recreation development experience can become successful if the outcome of recreation delivery benefits the local communities (Cooper *et. al* 2008). Tangible benefits to the community are seen in terms of how recreation and tourism contribute towards the satisfaction of their basic needs, such as poverty alleviation, as well as improving their quality of life.

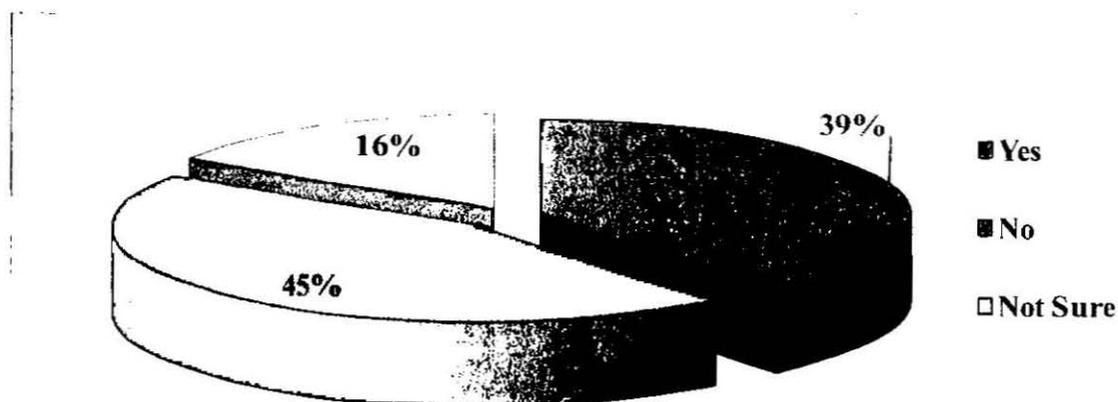
In other words, the government has attempted to put together acceptable outdoor recreation management and development strategies and practices that have the main intention of improving the recreation delivery system, as well as enhancing or benefiting the local communities and their natural and cultural environments (Page & Downing, 2002). In an attempt to activate the management practices in the Maphelane-KwaMbonambi area, the reserve and municipal officials have put up strategies for successful implementation of recreation development (Njobe & Botha, 2003), which include: stakeholder partnerships and co-operation, fulfilment of community aspirations; improved understanding of stewardship; sustainable conservation, equitable access to travel opportunities and tourism attractions (DEAT, 2006b); as well as job creation, and poverty alleviation (Yawitch, *et al*, 2003; Ashley & Roe, 2002).

4.7.1 Perceived State of Recreation Management Practices.

The stakeholders in the Maphelane-KwaMbonambi area were requested to indicate if they were positive or negative about the state or existence of recreation management practices in the area. What is shown in Figure 4.3 are the analyses pertaining to the perceived state of recreation management

practices in the study area. This analysis has assumed that the respondents are aware of the nature of management practices in the study area and some of them were supplied to the respondents in the questionnaire.

**FIGURE 4.3: PERCEIVED STATE OF RECREATION
MANAGEMENT PRACTICES IN THE STUDY AREA**



The majority of the respondents [45%] were somewhat negative about the state of management practices in Maphelane-KwaMbonambi area. The respondents' attitude towards outdoor recreation management practices, was negatively influenced by the fact that there was little knowledge about these practices, as well as that a substantial number of these respondents live in poverty and do not see the benefits of recreation. In other words, many of these respondents held no opinion about the management of natural resources available in the nature reserve. What is also significant in these findings is that about 16 percent of the respondents indicated that they were 'not sure' about the effectiveness or existence of management practices in Maphelane-KwaMbonambi area.

It is interesting that only about 39 percent of the respondents were positive about the state of management practices in Maphelane-KwaMbonambi area.

It is apparent that most of these positive respondents were categorised as tourists, officials and service providers. Perhaps some of these stakeholders responded so, because they were anticipating more marketing and usage of the facilities. Finally, the respondent from the local community group could have contributed less to the positive image of outdoor recreation management practices in the study area. Possible reasons could be that community members were financially restricted, accessibility was low and that they did not have adequate education and skills relating to outdoor recreation management practices in the study area.

On the basis of the outcomes of the analyses discussed above, it may be appropriate to conclude that Hypothesis 4, which states: *That the outdoor recreation management practices that are carried out in the study area are well perceived by the respondents*, must not be supported, rather be rejected. The basis for the rejection is that the majority of the respondents have actually negatively viewed the state of outdoor recreation management practices, in the study area.

4.7.2 The Analysis of Recreation Management Practices

The fundamental analysis of the recreation related management practices was founded on preselected practices given to the respondents to evaluate. Some of these practices included: land acquisition, resources ownership, skills development; job creation and employment, small business opportunities, infrastructural development, sustainable conservation, recreation facility promotion, building of schools, accommodation facilities, safety and security of recreators and financing of recreation projects. It is important to note that for purposes of analysing these practices only those that were most preferred and popular with the stakeholders were selected.

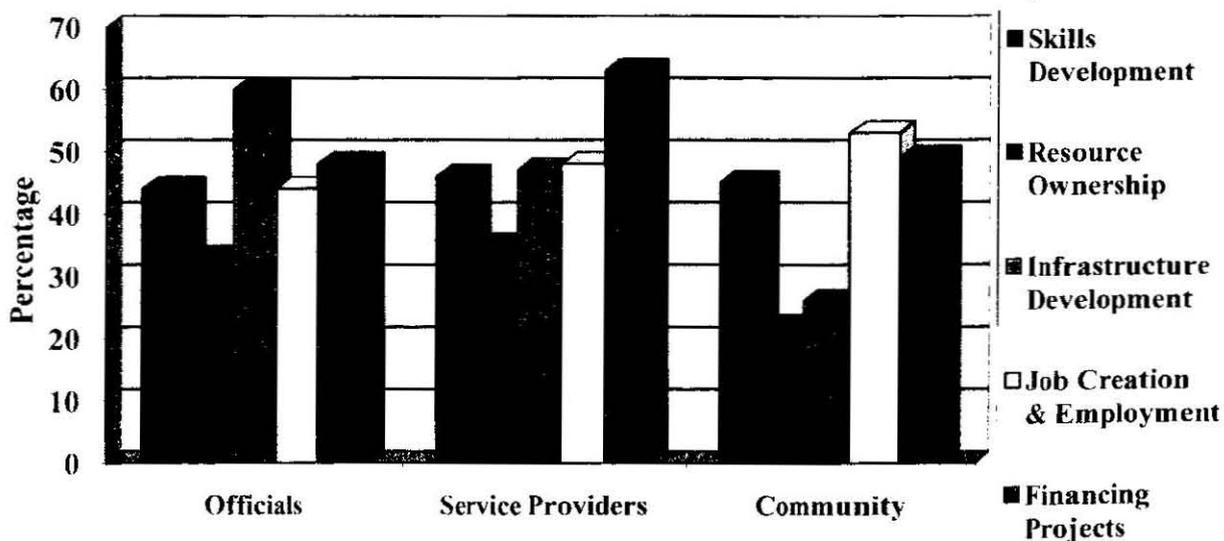
Notwithstanding the existence of the outdoor recreation management strategies, some of these practices are either not known or understood by some recreation stakeholders. The outdoor recreation management practices remain obscure if they are not used to respond to local community needs. It is for these reasons therefore, that the respondents (tourists, officials, service providers and the community) were requested to furnish their perceived views on outdoor recreation management practices and needs which they consider appropriate for the Maphelane-KwaMbonambi area.

In this regard, Figure 4.4 depicts the responses obtained from various stakeholders attempting to reveal the state of outdoor recreation management practices, which are important in the development and promotion of the outdoor recreation industry. In addition, the category of tourists was not included in the analysis, since tourist had previously indicated that they were outsiders and unfamiliar with making of policies, strategies, practices, and their implementation in the study area.

What is reflected in Figure 4.4 is that the majority of the local community saw job creation and employment initiatives [62%] and the skills development initiative [55%] as priority outdoor recreation management practice followed. Conversely, the local community [26%] were less in favour of the practice relating to infrastructural development in the study area, mainly because there are other matters of priority requiring the implementation of recreation management strategies. Majority of the local community were in favour of resource ownership [55%] as well as financing projects, that the outdoor recreation management practices should focus. The latter practices are associated with what the community member desire, this is far more the case that what other stakeholders hope for.

What is also indicated in Figure 4.4, is that most of the service providers [60%] viewed the financing recreation projects as a priority for them, whereas about 52 percent considered skills development as a priority management practice to be delivered. Furthermore, management practices related to resource ownership [33%], infrastructural development [33%] and job creation and employment [35%] as important practices to be implemented. The main reason for the responses is that service providers need these practices for their indirect beneficiation, particularly when the community also benefits from these practices. The service providers also think there is room for improvement in these practices because the government is encouraging the Black economic empowerment policies for all concerned with the outdoor recreation management practices in the Maphelane-KwaMbonambi area

FIGURE 4.4: PERCEIVED USEFUL OUTDOOR RECREATION MANAGEMENT PRACTICES



[n = 127. Some of the subjects gave more than one response for each statement]

Finally, many of the officials [48%] consider the financing of recreation projects as important, whereas about 50 percent considered skills development as a priority management practice for delivery. Furthermore, about 60 percent of the officials felt that infrastructural development was a priority management practice, as well as that 33 percent and 44 percent favoured the delivery of resource ownership and job creation and employment practices, respectively. Possible reasons for this outcome are that officials seem to be supporting government policy and practice in the Maphelane-KwaMbonambi area.

In view of the analyses and outcomes presented above, it seems appropriate to conclude that Hypothesis 4, which states: *That the outdoor recreation management practices that are carried out in the study area are well perceived by the respondents*, must not be supported. The basis for the rejection is that the majority of the respondents have actually negatively viewed the state of outdoor recreation management practices, in the study area. In addition, there seems to be too many outdoor recreation management practices in the study area that need to be attended to. The authorities, for example, are struggling with matters relating to: conservation of nature and community involvement; protection of wildlife; building of schools; and safety and security of tourists. Finally, it should be stressed that recreation management practices emphasise the development resources in such a way that natural, economic, social and aesthetic needs can be fulfilled while maintaining cultural integrity, essential ecological processes, biological diversity and life support systems (UNWTO, 2004).

4.8 OUTDOOR RECREATION BENEFITS IN THE STUDY AREA

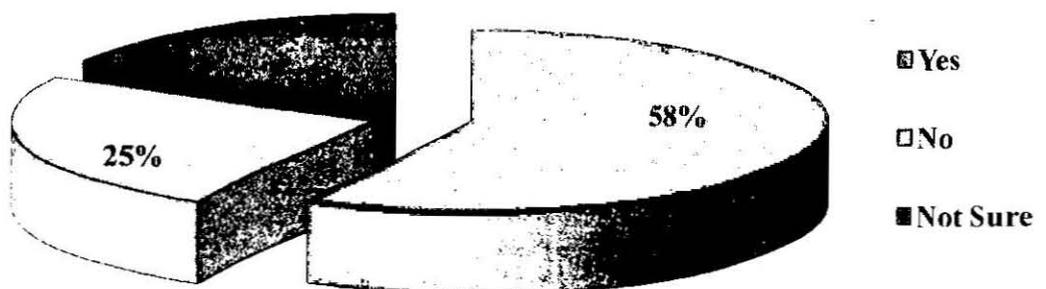
It has been mentioned that a well managed outdoor recreation environment usually end up by effectively benefiting the local community within any

outdoor recreation environment. Thus initially, the respondents were asked to indicate whether outdoor recreation benefits were available for the community in the study area or not.

4.8.1 Perceived existence of outdoor recreation benefits

Outdoor recreation benefits are important in achieving what can be called community buy-in, in outdoor recreation development initiatives. Some of the given reasons, which were positive, for the perceived existence of community benefits in the study area include the following: conservation of wildlife for posterity; general knowledge about recreation; establishment of arts and craft centre; creation of jobs and providing employment; small business opportunities. Some of the reasons given, which were negative, include the following: lack of adequate job creation and poverty reduction opportunities; lack of skills development; lack of information about recreation; scarcity of business opportunities; etc.

FIGURE 4.5 EXISTING RECREATION BENEFITS IN THE AREA



What is shown in Figure 4.5 is that the majority of respondents [58%] indicated on the positive, that there were adequate outdoor recreation benefits

existing in the study area. About 25 percent of the respondents were negative about these benefits, whereas a significant number [17%] indicated that they were not sure.

Flowing from the analysis given above, it may be concluded that **Hypothesis 5** which states: *That there are sufficient benefits from outdoor recreation opportunities for the community in the study area*, should be supported. The basis for this support is that the majority of respondents expressed a positive viewpoint about the existence or adequacy of outdoor recreation benefits in the study area. It should be noted that only a few of the many recreation benefits provided to the respondents were considered.

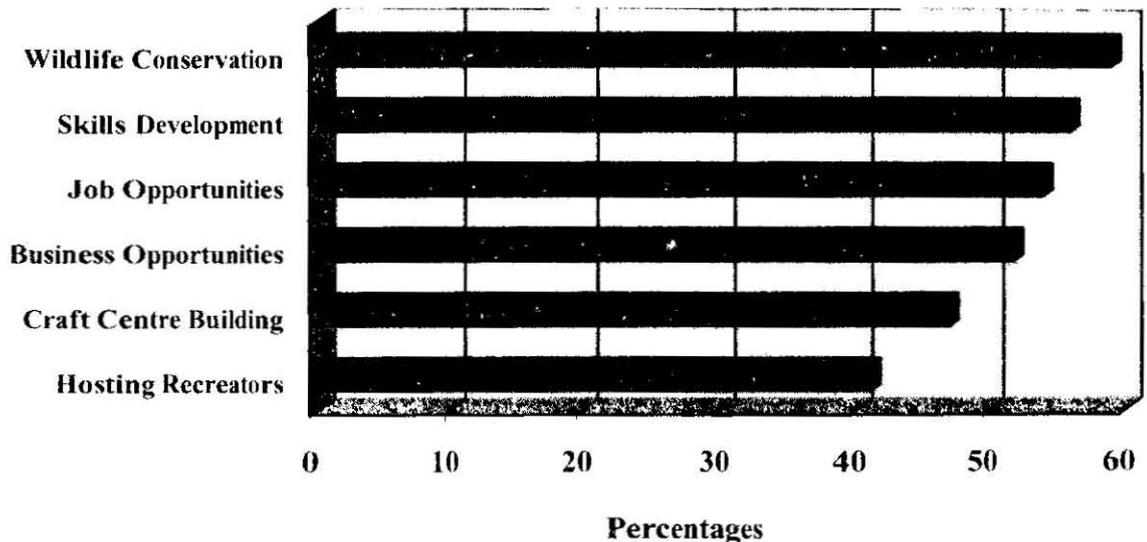
4.8.2 Types of Recreation Benefits Available in the Study Area

The conception of the availability of outdoor recreation benefits for the entire community in the study area is an important device for achieving community participation in the recreation industry. As such, the intention of this analysis was to establish or ascertain the outdoor recreation benefits that are available for the community as well as community beneficiation within the Maphelane-KwaMbonambi area. In this regard, the methodology used to assess the types of outdoor recreation benefits available in the study area, was to ask the respondents to: *“Kindly list those Benefits you think are available in the Maphelane-KwaMbonambi area”*.

What is shown in Figure 4.6 are the ranked outdoor recreation benefits perceived as available in the study area. What is worth noting is that each of the stakeholders: the tourists and recreators, conservation and municipal officials, the service providers and the local communities, tended to give those outdoor recreation benefits they have experienced and benefitted from.

It should be mentioned that the responses from tourists did not feature significantly because they are outsiders to the study area.

FIGURE 4.6 PERCEIVED TYPES OF OUTDOOR RECREATION BENEFITS AVAILABLE IN THE STUDY AREA



The results as shown in Figure 4.6 indicate that the majority of respondents identified conservation of wildlife [59%] and skills development [56%] among the communities to be the most available outdoor recreation benefits. The second best identified outdoor recreation benefits were the Job opportunities [54%] and business opportunities [52%] available in the study area. The envisaged plan of creating more jobs opportunities in the study area has stimulated the notion that jobs would encourage the respondents to acquire recreation related education. Some of the respondents saw the benefit of recreation knowledge as an adequate exercise for them to engage in.

The discussed statements represent some of the most desired benefits by the local communities, but were not necessarily abundantly available. Finally, the establishment of the craft centre building [47%] and hosting of recreators [41%] were seen as least available outdoor recreation benefits.

On the basis of the findings given above, it may be deduced that **Hypothesis 5**, which states: *That there are sufficient benefits from outdoor recreation opportunities for the community in the study area*, should be supported. The basis for this support is that the majority of respondents perceived the outdoor recreation benefits to be available in the study area, as well as that not all the stakeholders are benefitting from them as much as they would have liked. For example, the job opportunities variable was perceived by the number of respondents [54%] as an available recreation benefit, yet many of the local communities are unemployed. The justification for this finding is that many of the local communities are unemployed and always wish somebody could offer them a job. Also that tourism is regarded as an employment creator as it is continually advertised by the government in KwaZulu-Natal.

4.9 CONCLUSION

the findings emerging from the respondents indicate that the perceptions of the local community are positive about the management strategy used to conserve outdoor recreation resources in the Maphelane-KwaMbonambi area. The people of Maphelane area are aware of outdoor recreation resources that are available in the study area. Through their response on recreation practices, management and utilisation, the respondents also revealed that they know more about the aspects of statements used in the research study.

In this regard, it therefore stands to reason that the Maphelane managers do involve most stakeholders in formulating policies and strategies associated with improvement of outdoor recreation facilities and activities in the study area. Through these findings, it is worth deducing that the management of the outdoor recreation resources represents conservation at an optimum level. In the next and final chapter, the researcher has presented the summary, conclusions and recommendations pertaining to the outcomes found in this chapter.

CHAPTER 5

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

The planning and management of outdoor recreation resources, facilities and activities in any nature-based environment is one of the means through which the provincial and national governments can fulfil its reconstruction and development programme as well as the outdoor recreation management, towards the objective of recreation delivery (ANC, 1994; DEAT, 1996). As mentioned in Chapter 4, this approach is a means through which authorities can address those secondary needs that need to be fulfilled in all communities especially those in developing countries like South Africa, and KwaZulu-Natal in particular. This chapter therefore gives a summary of the findings and related recommendations pertaining to the promotion of outdoor recreation management practices in the Maphelane-KwaMbonambi area.

Pursuant to the objectives of this study, which have to do with the promotion of outdoor recreation management practices in the Maphelane-KwaMbonambi area, they are important for justifying the need for recreation benefits for local communities. To reiterate, this chapter presents some of the summary of conclusions, recommendations and the final conclusion of the study based on all chapters. Under summary the chapter reflects on the existing relationship between the stakeholders and their perceptions of the outdoor recreation management practices in the study area. The summary is also built around the

objectives and hypotheses of the study. The emerging outcomes from these objectives and hypotheses lead us to recommendations based on outcomes of the research study.

5.2 SUMMARY OF THE STUDY

In the context of what is called summary of the study, it is important to restate that this research study sought to investigate the management strategies in place, towards promoting outdoor recreation resources in the Maphelane environment. The ultimate goal of this study was to emphasise the conservation of the natural resources and environmental services and products, as a pre-condition for optimal socio-economic development. The summary in this study maps the investigation process from beginning to end.

The study was, in other words about the management strategies of outdoor recreation resources in the Maphelane-KwaMbonambi area. The authorities engaged in this study sought to facilitate the analysis of its programs and to ascertain whether its approach on management practices is based on acceptable principles. In order to establish this, a detailed analysis of the manner in which it has gone about with its management strategies in respect of outdoor recreation resources was undertaken. This was done through the study of reports of authorities, interviews with officials, staff and community members as well as observations of responses of the people in the study area.

The summary of categories of chapters given below also facilitates the understanding of what each was meant to do. For example, Chapter One, presented the introduction to the research study. It orientated the reader to the

key areas of the research: the problem statement, the objectives and hypotheses, the delimitation and significance of the study, and the methodology adopted.

Chapter Two, explored various authors' ideas related to the topic of the study. By so doing it gave direction to the theoretical foundation linked to the research findings in study, so that they could offer reasonable interpretation, reliant on a wider scope that comes from other authors on the same subject matter. Some of the key principles dealt with include: the types of outdoor recreation resources, the value of outdoor recreation resources, outdoor recreation management strategies, tools of environmental management, the national environment management act (NEMA) and other important principles.

Chapter Three, described the actual physical layout and matters related to the study area. It considered, among other aspects, the historical background, settlement and land tenure development, and the physiographic and climate characteristics. Social services and governance structures were also considered. Finally the importance and nature of resources was described under three categories of vegetation, sand dunes, water resources and land use,

Chapter Four, dealt with the analytical procedures engaged in as well as the actual analysis and synthesis of statistical data. The findings of the study were documented and meaning attached to them. The outcomes of the analysis leads to making conclusions about the acceptance or rejection of the various hypotheses postulated in accordance with stated objectives. The chapter also set the scene for generating conclusions and recommendations arising from the study.

that the most respondents fully understand the importance of outdoor recreation for purposes of strengthening the industry in the study area. In this regard it was concluded that Hypothesis 1, which stated: *That the Maphelane community fully understands the meaning and importance of outdoor recreation resources*, was supported. .

(b) The second objective of the study sought:

To establish the types of outdoor recreation facilities and services which are existing and available in the study area.

The majority of respondents, ranking highest, had indicated that they visited and participated in facilities extensively. Some of these facilities are beach, swimming areas, picnic areas, camping sites, fishing areas and game sites. The main reasons for visiting these facilities were that these facilities were preferred by family and many recreators and that these were seen as basic recreation or leisure facilities preferred by tourists.

In this regard the findings lead the study to conclude that Hypothesis 2, which stated: *That the respondents are familiar with the types of outdoor recreation facilities and services which are existing and available in the study area*, was supported.

With regard to outdoor recreation activities, the majority of respondents preferred a number of activities, such as game and bird-watching, nature trails and walks and water-sport such as surfing, skiing, diving, and so on. The activities were positively viewed and lead to Hypothesis 2, which stated: *That the respondents are familiar with the types of outdoor recreation facilities and services which are existing and available in the study area*, to be supported.

(c) The third objective of the study sought:

To reveal the participation patterns of the respondents in outdoor recreation facilities and activities in the study area

It is generally accepted that recreation management practices and strategies have the main intention of improving the recreation delivery as well as enhancing or benefiting the local communities and their natural and cultural environments (Page & Downing, 2002). In order to establish existing recreation management practices or strategies in the study area, respondents were asked to respond to the question: "Are you aware of any existing recreation management practices that are in place in the Maphelane-KwaMbonambi area?" The findings of the analysis were that the majority of stakeholders were not aware of existing ecotourism management strategies in the study area.

The outcome was that the majority of respondents perceived the recreation programmes that promote recreation delivery to be facilitated by the arts, handicraft and beadwork programme available in the study area. On the basis of such outcomes of these analyses, it was concluded that Hypothesis 3, which state: *That the participation patterns of the respondents in outdoor recreation facilities and activities are inadequate in the study area.* The hypothesis was supported.

(d) The fourth objective of the study sought:

To identify the outdoor recreation management practices that are carried out in the study area.

The majority of the respondents were negative about the state of management practices in Maphelane-KwaMbonambi area. The respondents' attitude towards

outdoor recreation management practices, was negatively influenced by the fact that there was little knowledge about these practices, as well as that a substantial number of these respondents live in poverty and do not see the benefits of recreation. In other words, many of these respondents thought nothing about the management of natural resources available in the nature reserve.

On the basis of the outcomes related to this objective it was concluded that Hypothesis 4, which state: *That the outdoor recreation management practices that are carried out in the study area are well perceived by the respondents*, must be rejected. The basis for the rejection was that the majority of the respondents have actually negatively viewed the state of outdoor recreation management practices, in the study area.

(e) The fifth objective of the study sought:

To ascertain the outdoor recreation benefits that are available for the community as well as community beneficiation

Even though the study area of Maphelane-KwaMbonambi has attempted to pay attention to nature conservation and outdoor recreation delivery, there still seemed to be unique problems about *benefiting the local communities*. Whilst the local community has looked at recreation resources as not leading to livelihood prosperity, the Maphelane-KwaMbonambi local authorities have focused on recreation as having positive and negative social, economic and environmental impacts on local communities (Cowan, *et al*, 2003; Binns & Nel, 2002).

The findings were that the majority of respondents indicated on the positive that there were adequate ecotourism benefits existing in the study area. Some of the reasons given, which were negative, include the following: lack of adequate job creation and poverty reduction opportunities; lack of skills development; lack of information about ecotourism; scarcity of business opportunities; etc.

What was established in this analysis is that the majority of respondents indicated a positive response, that there were adequate outdoor recreation benefits existing in the study area. Hence it was concluded that **Hypothesis 5** which stated: *That there are sufficient benefits from outdoor recreation opportunities for the community in the study area*, should be supported. The basis for this support was that the majority of respondents expressed a positive viewpoint about the existence or adequacy of outdoor recreation benefits in the study area.

Relating to the types of outdoor recreation benefits available in the study area, it was established that many of the statements or principles associated with community beneficiation were adequate in the study area. The basis for this support was that the majority of respondents perceived the outdoor recreation benefits to be available in the study area, even though not all the stakeholders are benefitting from their existence. For example, the job opportunities benefits were perceived by many respondents as available in the study area. The justification for this finding was that many of the local communities were unemployed and always wished somebody could offer them a job. Also that recreation and tourism were regarded as employment creator, a viewpoint that is continually publicised by the government in KwaZulu-Natal.

Finally, based on these analyses, it was appropriate to conclude that **Hypothesis 5**, which stated: *That there are sufficient benefits from outdoor recreation opportunities for the community in the study area*, should be supported.

5.4 RECOMMENDATIONS

It should be understood within the context of all unresolved problems and challenges existing in the study area, that some solutions need to be drawn from the already existing literary sources, theoretical framework and findings of this research study. The recommendations made in this section are aimed at clarifying some aspects of this study as well as to generalise on some of the findings in order to avoid some of the issues which are found to exist in the study area. On the basis of the interpreted data in the preceding chapter, the recommendations are made. The recommendations are presented as a contribution to the management strategy which seeks to introduce the understanding of outdoor recreation facilities and activities in the study area.

The authorities of the Maphelane-KwaMbonambi area should attempt to improve the outdoor recreation situation in the area by pursuing some of the following recommendations:

- Inculcate the respect and love of conservation as an established strategy for outdoor recreation development, considering that the research outcomes showed that the stakeholders favoured some improvements in recreation environment.
- Encourage more community participation in outdoor recreation activities, which are geared to achieving local community recreation benefits.

- Improve the accessibility of various stakeholders to recreation facilities, particularly related to the local community, as well as to the natural areas or conservation areas in the study area.
- Establishment of outdoor recreation programmes and practices which are associated with the creation of jobs, provide employment and alleviation of poverty, particularly among the local communities in the study area.
- Establish a range of skills development and training initiatives related to outdoor recreation facilities, activities and practices, which would facilitate the participation of community members in outdoor recreation business opportunities.

Finally, the establishment of outdoor recreation strategy in the study area, which seek to empower the local communities, is fundamental to a viable and transparent outdoor recreation industry. It should be recognised that the aim of the South African government is to achieve an outdoor recreation industry that is able to create job opportunities and alleviate poverty for all.

5.5 CONCLUSION

This chapter has attempted to summarise and review some of the research problems and objectives of the study, covering principles such as understanding, participation, recreation utilisation and outdoor recreation management practices, as well as community benefits from recreation. The utilisation of outdoor recreation management and development of strategies, is the cornerstone for community beneficiation within the study area. The chapter has also highlighted the comparative analysis of the principle of sustainable

conservation versus the job and business creation in the study area. The emerging outcomes of analyses associated with the objectives listed above, seem to have laid a foundation for making conclusions about the research question relating outdoor recreation management practices and beneficiation in the study area.

In conclusion, many outdoor recreation management practices such as dealing with facilities and activities are increasingly being criticised for being too industrial or commercial in approach, thus failing to convey principles of conservation, which should be found in nature reserves such the Maphelane-KwaMbonambi Nature Reserve.

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PERSONAL INTERVIEWS

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APPENDICES

APPENDIX A1 **QUESTIONNAIRE: MANAGEMENT**

This questionnaire is intended to be filled by the management of the study area.

TOPIC: Management Strategies for Outdoor Recreation Resources around the Maphelane Nature reserve: A Perception Study

1 DEMOGRAPHIC INFORMATION

1.1 Gender:

Male	01		Female	02	
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1.2 Age:

25 – 34	01	
35 – 44	02	
45 – 54	03	
55 – 64	04	
65 and above	05	

1.3 Classification of Residence

Rural	01	
Urban	02	

1.4 Level of Education

Matric	01	
Undergraduate Diploma	02	
Degree	03	
P. Diploma	04	
Other, Please Specify:		

1.5 Occupation

Professional	01	
Skilled	02	
Semi-Skilled	03	
Unskilled	04	
Unemployed	05	
Other, Please Specify:		

2. INFORMATION ABOUT MAPHELANE NATURE RESERVE

2.1 What are the current Recreators facilities / activities available in the area and how often are they utilized?

Facilities	Utilization		
	Very Often	Often	Seldom
Canoeing			
Camps			
Lodges			
Nature Trails			
Fishing			
Bird Watching			
Game Farming			
Other			

2.2 To what extent have nature resources been conserved in the study area, since the new management of the Nature Reserve?

NATURE RESOURCES	More	01	Less	02	Not sure	03
Wood						
REASON:						

NATURE RESOURCES	More	01	Less	02	Not sure	03
Water						
REASON:						

NATURE RESOURCES	More	01	Less	02	Not sure	03
Forest						
REASON:						

NATURE RESOURCES	More	01	Less	02	Not sure	03
Sea Food						
REASON:						

NATURE RESOURCES	More	01	Less	02	Not sure	03
Birds						
REASON:						

2.3 How many people from the local communities does Maphelane Nature Reserve employ?

0 - 10	01
10 - 20	02
20 - 30	03
30 - 40	04
> - 50	05

2.4 How would you describe the development in the area in terms of the following?

DEVELOPMENT	Very Good	Good	Adequate	Bad	Very Bad
Schools					
Employment					
Recreators activities					

Clinics					
Houses					
Conservation					
Education					
Job creation					
Other (specify)					

2.5 Indicate the areas in which the money accumulated through tourism activities at Maphelane Nature Reserve are spent on?

Areas		
Maintenance of the camp	01	
Community Levy	02	
Salaries to the Reserve Staff	03	
Other. Specify:-.....	04	
.....		
.....		

3. OPINION QUESTIONS

3.1 What is your perception about the nature conservation measures that are in place on the communities around Maphelane around the following restrictions

(a)

MEASURE	Positive	01		Negative	02	
Fencing						
REASON:						

(b)

MEASURE	Positive	01		Negative	02	
Restriction on Harvesting of Vegetation						
REASON:						

(c)

MEASURE	Positive	01		Negative	02	
Fishing Permits						
REASON:						

(d)

MEASURE	Positive	01		Negative	02	
Restriction on Hunting						
REASON:						

(e)

MEASURE	Positive	01		Negative	02	
Other						
REASON:						

3.2 Do you think there needs to be more Management strategies in the area?

Yes	No
-----	----

3.3 How do you feel about your Management style?

Very happy	Happy	Undecided	Unhappy	Very unhappy
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3.4 How would the wider community benefit more from the Reserve?.....

.....

.....

.....

.....

.....

APPENDIX A2

QUESTIONNAIRE: COMMUNITY

This questionnaire is intended to be filled by the Community in the study area.

TOPIC: Management Strategies for Outdoor Recreation Resources around the Maphelane Nature reserve: A Perception Study

1. DEMOGRAPHICS CHARACTERISTICS

1.1 Gender:

Male	01		Female	02	
------	----	--	--------	----	--

1.2 Age:

25 - 34	01	
35 - 44	02	
45 - 54	03	
55 - 64	04	
65 and above	05	

1.3 Classification of Residence

Rural	01	
Urban	02	

1.4 Level of Education

Matric	01	
Undergraduate Diploma	02	
Degree	03	
P. Diploma	04	
Other, Please Specify:		

1.5 Occupation

Professional	01	
Skilled	02	
Semi-Skilled	03	
Unskilled	04	
Unemployed	05	
Other, Please Specify:		

2. MANAGEMENT AND TRAINING + INVOLVEMENT

2.1 What does management mean to you?

Hospitality	01
Cultural + Historical entertainment	02
Travel	03
Conservation	04

2.2 Of the listed tourism programmes which one do community members participate in?

Accommodation	01
Hospitality	02
Transport	03
Craftwork / Beadwork	04
Fishing	05
Site viewing	06

2.3 Does the local community involve itself in any of the following events which are earmarked to promote the management for outdoor recreation resources?

Arbor Day	01
Heritage Day	02
Cultural Day	03
Excursion	04

2.4 Would you be prepared to support your children who study natural recreation resources?

Yes	01
No	02
Not sure	03

2.5 Do you think management of environment can play a role in school?

Yes	01
No	02

2.6 Does the local municipality do enough to promote conservation of natural recreation resources?

Yes	01
No	02
Not sure	03

2.7 Does the community of the area benefit from the reserve?

Yes	01
No	02

3. What is this money used for?

Activity	Tick
Developing infrastructure - road, electricity	
Providing health- care facility	
Developing education	
other	

4. Do you think nature conservation measures implemented by KZN Wildlife in the area has negatively affected your community?

Yes	01
No	02

5. Which measures have impacted on the community and state if they are negative or positive and give reason for your answer?

5.1

MEASURE	Positive	01		Negative	02	
Fencing						
REASON:						

5.2

MEASURE	Positive	01		Negative	02	
Restrictions in harvesting of vegetations						
REASON:						

5.3

MEASURE	Positive	01		Negative	02	
Fishing Permits						
REASON:						

5.4

MEASURE	Positive	01		Negative	02	
Restrictions on hunting						
REASON:						

5.5

MEASURE	Positive	01		Negative	02	
Other						
REASON:						

6. What types of Recreators' activities occurs in your area?

Recreators Activity	Tick
Nature Trails	
Fishing / Angling	
Game Farming	
Snorkeling	
Bird – Watching	
Canoeing	
Other	

7. Do you perceive that management has increased since there is an availability of outdoor recreation resources in your area?

Yes	01
-----	----

8. What priorities for development could improve the community?

Improvements	Tick
Development of a school	
Creation of more jobs	
Development of services such as health care	
Improving the infrastructure – roads, electricity, water and telephone.	
Improving the economy of the community more shops, food production and accommodation.	
Better relationship with reserve staff and managers – less impact on environment	
Other	

9. How has your natural recreation Resources use changed in recent times? (COMMENT ON THE STATE OF NATURAL THROUGH THEY CONSTANT USAGE.

1. Poor state
2. Fair
3. Bad state

9.1.

NATURE RESOURCES	More	01		Less	02	
Water						
REASON:						

9.2

NATURE RESOURCES	More	01		Less	02	
Forest						
REASON:						

9.3

NATURE RESOURCES	More	01		Less	02	
Sea Food						
REASON:						

10. Are there any recommendations that you can give which you think will improve management style in your area?

.....

.....

.....

.....

.....

APPENDIX A3

QUESTIONNAIRE: MAPHELANE NATURE RESERVE STAFF

This questionnaire is intended to be filled by the Nature Reserve Staff in the study area.

TOPIC: Management Strategies for Outdoor Recreation Resources around the Maphelane Nature reserve: A Perception Study

1. DEMOGRAPHIC CHARACTERISTICS

1.1 Gender:

Male	01		Female	02	
------	----	--	--------	----	--

1.2 Age:

20 – 25	01	
25 – 35	02	
35– 45	03	
45 – 55	04	
55 and above	05	

1.3 Classification of Residence

Rural	01	
Urban	02	

1.4 Level of Education

Matric	01	
Undergraduate Diploma	02	
Degree	03	
P. Diploma	04	
Other, Please Specify:		

1.5 Occupation

Professional	01	
Skilled	02	
Semi-Skilled	03	
Unskilled	04	
Unemployed	05	
Other, Please Specify:		

2. INFORMATION ABOUT MAPELANE NATURE RESERVE

2.1 What are the impacts of nature conservation measures on the communities Around Mapelane?

MEASURE					
Restrictions on harvesting of vegetations	Positive	01		Negative	02
REASON:					

2.2

MEASURE					
Fencing Permits	Positive	01		Negative	02
REASON:					

2.3

MEASURE					
Restrictions on Hunting	Positive	01		Negative	02
REASON:					

2.4

MEASURE					
Restrictions on harvesting of Izimbaza	Positive	01		Negative	02
REASON:					

2.5

MEASURE					
Other	Positive	01		Negative	02
REASON:					

3. What are the current Recreators facilities available in the area and how often are they utilized?

Facilities		Utilization		
		Very Often	Often	Seldom
Camp sites				
Log Cabins				
Nature Trails				
Fishing				
Canoeing				
Other				

4. How are these activities beneficial to the community and reserve?

4.1

RECREATOR ACTIVITY		
Camps	Social Benefits	Economic Benefit
REASON:		

4.2

RECREATOR ACTIVITY	Social Benefits	Economic Benefit
Nature Trails		
REASON:		

4.3

RECREATOR ACTIVITY	Social Benefits	Economic Benefit
Canoeing		
REASON:		

4.4

RECREATOR ACTIVITY	Social Benefits	Economic Benefit
Fishing		
REASON:		

4.5

RECREATOR ACTIVITY	Social Benefits	Economic Benefit
Log Cabins		
REASON:		

4.6

RECREATOR ACTIVITY	Social Benefits	Economic Benefit
Other		
REASON:		

5. How many people from the local communities do the Mapelane Nature?
Resource employs?

Number	Tick
0-10	
10-20	
20-30	
30-40	
> 40	

6. How would you describe the development in the area?

DEVELOPMENT	Very Good	Good	Adequate	Bad	Very Bad
Schools					
Employment					
Recreator activities					
Clinics					
Houses					

7. The money gained through Recreator activities is spent on:

Recreator Activity	Tick
Maintenance of the Recreator camp	
Percentage given to communities	
Goes to nature reserve staff (salaries)	
Other	

8. Do you think there is a need to be more management strategies in the area?

Yes	No

9. OPINION QUESTIONS

9.1 How do you feel about managers and management style?

Very Happy	Happy	Undecided	Unhappy	Very Unhappy

9.2. To what extent have nature resources been used in the study area, since the you have started working in the Nature Reserve?

9.2.1

NATURE RESOURCES	More	01		Less	02	
Wood						
REASON:						

9.2.2

NATURE RESOURCES	More	01		Less	02	
Water						
REASON:						

9.2.3

NATURE RESOURCES	More	01		Less	02	
Grass						
REASON:						

9.2.4

NATURE RESOURCES	More	01		Less	02	
Sea Food						
REASON:						

10. Do you feel that your community has understood the meaning of outdoor recreation resources in the area?

Yes	No
-----	----

11. If yes, how much do they understand?

More	Less
------	------

12. Do you know if the community receives any money from the reserve as a result of tourism activities?

Yes	No
-----	----

13. What is the money used for?

Activity	
Developing Infrastructure – Roads , Electricity	
Providing Health - Care Facilities	
Developing Education	
Other	

14. Do you perceive that management has increased since there is an availability of outdoor recreation resources in your area?

Yes	No
-----	----

15. How much does the residents participate in the tourism activities?

Very Often	Often	Seldom
------------	-------	--------

16. Do the managers involve the community during decision-making policies?

Yes	No
-----	----

APPENDIX - B

University of Zululand
DEPARTMENT OF RECREATION
& TOURISM



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Ref: mrt/ms/2010

1 November, 2008

To whom it may concern

Dear Sir /Madam

RE: REQUEST TO CONDUCT RESEARCH: MIS. T.O MAKHUBU

The above-named student, Ms Thoko Orange Makhubu [206000764] is a *bona fide* part-time student of the Department of Recreation and Tourism at the University of Zululand. She is registered for the Master's in Recreation and Tourism [MRT]. As part of her academic programme, she is required to conduct a research study on an appropriate research topic. The accompanying questionnaire is part of her research project seeking to establish the perception of the community on Outdoor Recreation Resources in the study area of her choice: The actual title of her research study is:

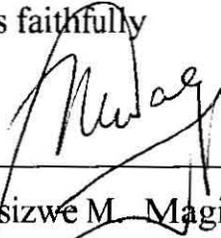
Management Strategies for Outdoor Recreation Resources Around the Maphelane Nature Reserve: Perception Study.

This research inquiry is undertaken mainly for academic purposes among the KwaMbonambi Local Municipality communities and stakeholders associated with tourism. It is hoped that the findings of the research investigation will make a meaningful contribution to the fields of tourism, as well as the relative understanding of the operation of policies, activities and opportunities associated with the management strategies of natural resources.

All information collected from you, your organisation or the KwaMbonambi Local Municipality environment, through the interview or questionnaire, shall be kept in strict confidence, possible. The Department of Recreation and Tourism shall assume no responsibility for the interaction between the researcher and respondents that goes bad or sour.

Your assistance in this regard will be highly appreciated.

Yours faithfully



Lindisizwe M. Magi (Prof)
Department of Recreation & Tourism
University of Zululand

CC. Ms T.O Makhubu