

**LAND, LABOUR AND LIVELIHOODS: THE PRODUCTION OF
NATURE AND POVERTY IN NORTHERN KWAZULU-NATAL**

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ABSTRACT

In many parts of South Africa, a growing trend to convert traditional commercial agricultural farms to wildlife-based forms of land use is having significant but largely unexplored impacts on farm dwellers and neighbouring rural communities. This trend is very evident in the province of KwaZulu-Natal where there has been a significant shift in rural landscapes as land is being “rehabilitated”, from commercial cattle farming in particular, and developed into Private Game Reserves (PGRs).

This research forms part of a larger project funded by Southern African Programme for Alternatives in Development (SANPAD). One of the research partners was the Association For Rural Advancement (AFRA), an independent Non-Governmental Organisation working on land rights and agrarian reform in KwaZulu-Natal, South Africa. AFRA’s work focuses on black rural people whose rights to land have been undermined, whose tenure is insecure, and who do not have access to sufficient land to fulfil their development aspirations or their basic needs. Very little research has, however, been conducted on the large shift in land use in northern KwaZulu-Natal and how rural communities are being impacted in these areas; a situation this study intends to begin to remedy.

This study focuses on the north-eastern area of the province, and in particular the Mkuze region, where the move to create PGRs has significantly changed the social and physical geography of the area. In order to gain a clearer understanding of this phenomenon, research was conducted on the relationship between the tribal/ traditional community of Ingwenya and five surrounding game reserves (namely, Thanda/ Intibane, Mkuze, Phinda, and Kube-Yini). While Mkuze is a state game reserve, created in the early twentieth century, the others are PGRs.

The study was both quantitative and qualitative in nature which involved collecting household questionnaire surveys in the community of Ingwenya, in-depth interviews with ex-farm dwellers, questionnaire surveys with the managers of the five PGRs chosen in this study, oral and documentary evidence and participant observation.

This dissertation suggests that the establishment of private game reserves is bringing about new forms of nature production, in particular the packaging of a “commodified nature” in the region. Very simply, it is a produced nature that is being commodified and sold instead of the more traditional agricultural “commodity” of cattle or crops. The main focus of this study is how this produced nature and land use change is shaping and changing rural landscapes, and how (if at all) private game reserves are inserted into the livelihoods of the community of Ingwenya.

DECLARATION

The work described in this dissertation was carried out in the School of Environmental Sciences, University of KwaZulu-Natal, on the Howard College Campus, from February 2007 to November 2011, under the supervision of Dr. Shirley Brooks and Professor Urmilla Bob.

This study represents original work by the author and has not been submitted previously in any form to another university. Where use was made of work of others, it has duly been acknowledged in the text.

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LIST OF ACRONYMS

AFRA	Association for Rural Advancement
APU	Anti-Poaching Unit
CBC	Community Based Conservation
CBNRM	Community Based Natural Resources Management
DDT	Dichloro Diphenyl Trichloroethane
DFID	Department for International Development
DWAF	Department of Water Affairs and Forestry
GIZ	Gesellschaft Technische Zusammenarbeit
GPS	Global Positioning System
IDP	Integrated Development Plan
KZN	KwaZulu-Natal
KZNTA	KwaZulu-Natal Tourism Authority
NGO	Non-Governmental Organisation
PGR	Private Game Reserve
SANPAD	South African Netherlands Programme for Alternatives in Development
SDF	Spatial Development Framework
SLA	Sustainable Livelihoods Approach
SLF	Sustainable Livelihoods Framework
SPSS	Statistics Programme for Social Sciences
UDM	Umkhanyakude District Municipality
UDT	Ubombo Development Trust

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1 CHAPTER ONE - INTROCUCTION

1.1 INTRODUCTION

In many parts of South Africa, a growing trend to convert traditional commercial agricultural farms to wildlife-based forms of land use (namely biodiversity conservation, hunting and ecotourism) is having significant but largely unexplored impacts on farm dwellers and neighbouring rural communities. This trend is very evident in the province of KwaZulu-Natal (KZN) where there has been a significant shift in rural landscapes as land is being “rehabilitated”, from commercial cattle farming in particular, and developed into Private Game Reserves (PGRs). This development is closely linked to the ecotourism industry (Brooks and Spierenburg, 2010a). Although tourism is often promoted as a mechanism for rural development, there is growing concern that the impact of tourism and conservation on local communities is not always beneficial and may include a number of negative livelihood consequences (AFRA, 2004). These impacts vary in scope and intensity and may include; uneven economic growth, loss of access on the part of the poor to natural and other resources, cultural pollution, and labour exploitation. One of the critical areas of concern is the dispossession and loss of rights, particularly land rights, for farm dwellers and rural communities - who are amongst the most marginalised group of people in the country and who have yet to be brought into the mainstream of development and to benefit from the new South Africa (Worden, 1994).

Those concerned about the loss of land access by the poor argue that land is the central component of rural livelihoods, and without it communities lose access to security in the form of natural resources, financial capital and cohesive social structures (AFRA, 2004). The question arises: are the effects equally pronounced and equally negative throughout the province of KZN, as more and more land is converted to PGRs? The outcomes are likely to differ in different parts of the province, due to the diverse agrarian histories and land tenure arrangements in particular areas. In the north-eastern parts of the province (Zululand), farm dwellers were in many cases removed from farms some time ago during the period of high apartheid (1960s and 70s) (Robertson, 1990; Skelcher, 2004). Due to the presence of adjacent tribal lands and ease of access to these lands, they have been absorbed into the local communities and received land access – a very different picture from that in the (western) Midlands area of KZN where communal land access is more

difficult and where farm dweller livelihoods are tied to white-owned farms (Brooks and Spierenburg, 2010a).

This study focuses on the north-eastern area of the province, and in particular the Mkuze region, where the move to create PGRs has significantly changed the social and physical geography of the area. The dissertation asks whether the creation of PGRs has been a positive step for the rural livelihoods of poor communities in the Zululand area. How does being surrounded by both private and state game reserves affect rural communities? How have ex-farm dwellers been received by the communities living on tribal lands? How and to what extent have livelihoods been adapted? What are the spatial and institutional relations like, not only between community members but with surrounding PGRs?

In order to gain a clear understanding of this phenomenon, particularly in northern KZN, research was conducted on the relationship between the “tribal” community of Ingwenya and five surrounding game reserves (namely, Thanda/ Intibane, Mkuze, Phinda, and Kube-Yini). While Mkuze is a state game reserve, created in the early twentieth century, the others are PGRs.

1.2 RATIONALE FOR THE STUDY

Globally, and in South Africa, the conservation and tourism sectors have been heavily promoted as a means to develop third world countries and promote rural development. However, this does not always happen: indeed nature conservation often causes negative social, economic and environmental impacts to host communities as the title of an edited collection on the topic by Broch-Due and Shroeder (2000) suggests - *“Producing Nature and Poverty in Africa”*. This study aims to gain a better understanding of the impacts of contemporary agrarian change in north-eastern KZN, with a particular focus on the conversion of conventional agricultural farms to game farming. The responses of local people in the form of livelihood strategies are also a key focus of the study.

This research forms part of a larger project funded by the South Africa Netherlands Programme for Alternatives in Development (SANPAD). One of the research partners was the Association For Rural Advancement (AFRA), an independent Non-Governmental Organisation (NGO) working on land rights and agrarian reform in KZN, South Africa.

AFRA's work focuses on black rural people whose rights to land have been undermined, whose tenure is insecure, and who do not have access to sufficient land to fulfil their development aspirations or their basic needs. Very little research has, however, been conducted on the large shift in land use in northern KZN and how rural communities are being impacted in these areas; a situation this study intends to begin to remedy.

This dissertation suggests that the establishment of PGRs is bringing about new forms of nature production, in particular the packaging of a “commodified nature” in the region. Very simply, it is a produced nature that is being commodified and sold instead of the more traditional agricultural “commodity” of cattle or crops. The main focus of this study is how this produced nature and land use change is shaping and changing rural landscapes, and the possible effects for rural communities and their livelihood strategies.

Farm dwellers and rural communities in general are arguably the most disadvantaged and poorly protected group in South Africa (Brooks, 2002; AFRA, 2004). Thus, this research aims to quantify the nature of this marginalisation, whilst simultaneously providing a qualitative analysis of the reality of ex-farm dweller and community responses to these land use changes. This study thus aims to contribute to the limited literature on this topic as well as providing insights which may assist towards the socio-economic development of the Zululand region.

1.3 AIM AND OBJECTIVES

The aim of this research is to investigate the impacts of privatised forms of nature production for poor communities in northern Zululand. This research engaged with the community of Ingwenya (residents on adjacent communal/tribal land) to explore the livelihood implications for affected ex-farm workers and local community members. To achieve this aim, several objectives were designed to guide the research process. The objectives are derived from engagement with the literature and align with the methodology adopted for this study. The following is a breakdown of each objective into more specific sub-questions:

Objective 1: To understand the historical and current processes of agrarian change, in particular new forms of nature production in Northern KwaZulu-Natal.

- a. How has land use in the Zululand region shifted over the past twenty years?
- b. How is nature being produced and for what reason?
- c. Why is this trend so dominant in this region?

Objective 2: To explore the impact of the current privatisation and production of nature on the socio-economic position of ex-farm dwellers and rural communities, in particular that of Ingwenya.

- a. What is the current livelihood status of the average household in the community of Ingwenya?
- b. What does the shift from commercial agriculture to wildlife based forms of land use mean for rural livelihood strategies? How have local livelihoods as well as perceptions of the privately owned farms changed with the conversion from commercial agriculture to wildlife forms of land use?
- c. How (if at all) are the game reserves inserted into the livelihood strategies of the community of Ingwenya and how different is this from historical labour relations that the community of Ingwenya may have had with neighbouring agricultural farms?

Objective 3: To explore current relationships between the community of Ingwenya and the five contiguous game reserves.

- a. How has the conversion to private game farming altered the geographic context and local mobilities of the community of Ingwenya? Are PGRs hardening the boundaries (for example, through the construction of game-proof fencing)?
- b. Does the community see a difference between private and state owned reserves in terms of the nature of the relationship?
- c. What forms of engagement have emerged between local people living at Ingwenya and the management of the five different reserves?

1.4 STRUCTURE OF THE DISSERTATION

Chapter One provided an introduction to the research, outlining the rationale and motivation for the study, the specific aims and objectives of the research. *Chapter Two* situates the study within the broader body of literature pertaining to the privatisation and production of nature. *Chapter Three* presents a background to the study area, giving a historical overview of the area and providing basic information on the game reserves under consideration. *Chapter Four* sets out the methods utilized in the data collection process as well as explaining the way in which this data was analysed and pointing out the limitations of this particular study. *Chapter Five* presents the data collected and elaborates on the results obtained from the application of the methods described in *Chapter Four*. *Chapter Six* presents a summary of the key findings of the research, based on the objectives of this study, and sets out recommendations and general conclusions.

2 CHAPTER TWO – LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

2.1 INTRODUCTION

The purpose of this *Chapter* is to provide an academic context in which to locate this research. It lays out the various debates and perspectives relating to the production of nature and the impacts of conservation practices on the rural poor. It explores the concept of nature, how perceptions and the portrayal of nature has changed through history and how this may trickle down to cause a number of environmental and social issues. *Section 2.2* discusses two main debates about nature in the human and natural sciences. This introduces the post-structuralist/“nature sceptical” - theoretical foundation on which this research is based. It emphasises the importance of highlighting the ways in which nature is socially constructed. *Section 2.3* discusses some of the literature on western ideas of nature and wilderness and attempts to deconstruct these ideas further, in order to expose some of the hidden processes and histories that lie within them. This section goes on to elaborate on how these western views of nature have structured and continue to structure the ecotourism and modern tourism movements, in Africa and more specifically South Africa, scrutinising how these ideologies may result in a number of conservation contestations and in many ways may perpetuate poverty. Lastly, *Section 2.4* outlines the conceptual framework of the Sustainable Livelihoods Approach (SLA), which was used to guide and analyse the data collected for this research. It also substantiates the reasons as to why this approach was adopted. Overall, the intention of this *Chapter* is to provide a theoretical framework to understand the empirical case study presented in *Chapter Five*.

2.2 THE MODERN IDEA OF NATURE AND WILDERNESS

This section problematizes the idea of nature as merely a given and discusses the two main debates about nature in the human and natural sciences.

2.2.1 The Problem with Nature and Wilderness

One associates game reserves or wilderness areas with nature at its finest, natural landscapes of fauna and flora devoid of and separate from anthropogenic contamination or influences. These areas are seen as “pristine”, set apart, the last remnants of a lost Eden,

where one may retreat, cleanse the spirit and get back to nature (Cronon, 1995). The meaning of wilderness and nature seems to be given in most people's minds and few people give it a second thought, however, nature is a complex word and has come to mean different things to different societies through time.

Game reserves are seen as natural spaces. However, in the case of this research, many of the private game reserves studied were under commercial agriculture less than a decade ago. They are now portrayed as "untouched" and perceived as areas worthy of conservation. What specifically is being conserved? If the answer is nature, then one needs to consider the idea of nature more deeply.

The philosopher Kate Soper considers these questions in her book, *What is Nature? Culture, Politics and the Non-Human* (1995). Soper is interested in the taken-for-granted concept of nature in western thought, and in particular the extent to which the boundaries between nature and "culture" are actually rather arbitrary. Why is a game reserve more natural or closer to nature than a farm under commercial agriculture? Are cows less a part of nature than carefully managed game species? If it is human interference and control that renders something not a part of nature, then it may be argued that game reserves require as much anthropogenic input as agricultural farms. Are game reserves then not natural and not worthy of conservation? Agriculture is more obviously linked to the capitalist market; yet "the wilderness" too is a prime asset for the tourism industry and therefore closely interwoven into networks of capital.

It is clear that nature is not always what it may appear. The main issue is whether it is useful to see nature as a social construction or as something that exists separate from our interpretation. This question on nature and culture has been the topic of debate between many human and physical geographers, in what Naylor (2005) terms the "science wars", for quite some time. Two of these debates are discussed further, these are the constructivist versus anti-constructivist positions; and the Marxist/materialist versus post-structuralist/discursive approaches.

2.2.2 Constructivist versus Anti-Constructivist (Nature Sceptical or Nature Endorsing)

Constructivist approaches to understanding nature claim that all realities are influenced by the socio-cultural context in which they occur and cannot be independent from it. Nature in this light is not something real or objective but something constructed and produced, with a particular history and interpretation (Proctor, 1998). Constructivists would argue that scientific knowledge about nature is constructed by scientists and not discovered from the world. This does not, however, mean that nature exists only in peoples' minds, but rather that "human beings cannot objectively know or understand the environment unmediated by social factors" (Whittaker and Mercer, 2004: 264). Constructivists are thus pessimistic about the ability of humans to make universal claims about nature.

The implication that nature does not exist in reality and the acceptance of subjective interpretations are the focus of criticism of the anti-constructivist approach. Anti-constructivists want to retain the idea of nature as something that has intrinsic value, truth or authenticity, separate from human representation or conceptions (Soper, 1995). Nature is thus external from humans, in its pristine God-given state, autonomous, in its raw material form, inherently non-human and non-social (Soper, 1995). "For anti-constructivists, nature is a real entity, a vanishing place under serious threat around the globe. For them, the social construction of nature position is dangerously close to relativism, a notion that unforgivably undermines conservation efforts" (Brooks, 2000: 65). Hay (2002: 56) further argues that the reduction of nature to language constitutes a "verbal attack on nature" and that by questioning nature's value, constructivists could be contributing to its ongoing exploitation. By saying that nature is part of the discursive world, constructivists are criticised for framing environmental problems as produced and solved by debate rather than by embodied action (Kidner, 2000).

Attempts have been made to reconcile the two theoretical approaches, however, there remains contentious debate and incompatible differences. Soper (1995) suggests that it would be more useful to view these two approaches rather as nature sceptical (constructivist) or nature endorsing (anti-constructivist). The position in this dissertation is one of nature sceptical, as it views nature not as a given, but rather a complex construction, viewed through a cultural lens. It seeks to understand views of nature, how

they are generated and how they change with regard to social and historical contexts. Cronon (1995: 69) sums up the changing constructions of nature and wilderness:

The more one knows of its particular history, the more one realises that wilderness is not quite what it seems. Far from being the one place on earth that stands apart from humanity, it is quite profoundly a human creation.

2.2.3 Materialist Production versus Cultural/Discursive Construction (Marxism versus Post-structuralism)

Within the constructivist or nature sceptical viewpoint, there are two different but often complementary traditions of trying to understand nature. These can be termed the Marxist and Cultural Discursive approaches, and they are considered briefly here.

The Materialist approach developed by Karl Marx in the late 19th century has been adopted by many human geographers and sociologists to understand how social ideas, activities and devices have reshaped the natural world. Marx's approach is primarily concerned with the material formation of nature as it is put to human uses under different conditions of production through the labour process. "Marx noted that through industrial capitalism, those things that were accustomed to be thought of as natural, were increasingly being transformed into products of human labour" (Whatmore, 1999: 5). Marxism challenges the idea of a pure, "pristine" nature, separate from society. In this sense a game reserve is no more natural than an agricultural farm, as they are both mediated by human labour and produced for human consumption.

The Cultural Discursive approach, rooted in the post-structuralist theoretical framework, on the other hand, is concerned with the changing idea of nature and what it has meant to different societies and how they go about representing it. "Simply put, post-structuralism suggests that human beings can never have direct access to the world, or to „nature“, but can only approach it through language" (Brooks, 2000: 69). Nature then, is a category of the human imagination and linguistically constructed, therefore, is best treated as part of culture as there are many incompatible ways of seeing the same natural phenomenon, event or environment. In the case of this research, the view of nature of the local communities may be very different to that of the game reserve owners and even the tourists that visit the area.

Both approaches would largely agree in distinguishing between first, second and third nature. According to Whatmore (1999) first nature is the biophysical environment in its original state, therefore devoid of human interference. Second nature is part of the material world that has come into contact with humans, who through their labour has altered and/or produced the natural world. This view of nature is in line with the Marxist Materialist approach discussed above. An example of this would be fruit from a plantation, or commercial agricultural production of fruit. In third nature, the degree of human manipulation has gone further, for example, nature that has been computer simulated or genetically modified. Or to give a more applicable example, this may be seen in wildlife/nature documentaries or the marketing of PGRs, where images are altered, lighting is distorted, time is elapsed and it is made to seem that there is an abundance of animals in “wild nature”, while instead, it is a highly constructed and managed “natural” space, distorted even further by human’s portrayal. Interest in “third nature” is in line with the post-structuralist/constructivist approach, as this is a nature which is shaped as powerfully by the human imagination as by any physical manipulation (Whatmore, 1999).

Applying these ideas to the production of wilderness, the environmental historian William Cronon (1995) believes that a core problem with the idea of wilderness is that it distances us too much from the very things we should value. Humans tend to parcel off areas to conserve and protect - generally larger areas of open space are considered more of a true wilderness and a space that needs to be preserved from human influence. “If it isn’t hundreds of square miles big, if it doesn’t give us God’s-eye views or grand vistas, if it doesn’t permit us the illusion that we are alone on the planet, then it really isn’t natural. It’s too small, too plain, or too crowded to be authentically wild” (Cronon, 1995: 87). It is this view of nature and wilderness that Cronon blames for many environmental and social problems. In his controversial analysis of the disappearing American wilderness frontier, (Cronon, 1995: 86) highlights the following:

That without realising it, wilderness tends to privilege some parts of nature at the expense of others. Most of us still follow the conventions of the romantic sublime in finding the mountaintop more glorious than the plains, the ancient forest nobler than the grasslands, the mighty canyon more inspiring than the humble marsh – a preference that has nothing to do with nature and everything to do with the cultural traditions of the sublime.

Nature and wilderness is viewed as something distant, separate from humans and from the civilized world we live in, even to the extent that to authenticate this view of nature, people are often forcefully removed so that an area may appear more natural. Although Cronon (1995) was severely criticised for undermining conservation efforts in America, he does make a valid point in how we place priority to type of nature that is perceived to be closer to first nature.

The various approaches to nature and culture discussed above, essentially draw attention to the idea that nature is not just “natural”, something opposite to culture, or humans, but is in different ways produced through human labour and constructed through a cultural lens. Noel Castree (cited in Whatmore, 1999: 5) highlights that this production of nature raises three important points:

1. To acknowledge that nature is produced undermines the familiar, but misleading idea that it is something fixed and unchanging. Instead we are forced to look at the specific ways in which human societies have interacted with the natural environments in different times and places.
2. It captures the double edged sense in which the process of producing goods for human use and exchange simultaneously transforms the physical fabric of the natural world and people’s relationship to it.
3. It alerts us to the way in which capitalist production, in particular, seems to stop at nothing in its quest for profitability, turning of landscapes, bodies and these days, even the molecular structure of cells into marketable commodities.

2.3 WESTERN IMAGES OF NATURE AND WILDERNESS IN AFRICA THROUGH HISTORY

As this dissertation takes a constructivist approach to understanding nature, it follows the belief that nature is not a fixed and unchanging entity. It thus seeks to understand the specific ways in which human societies have perceived and produced nature through history. As Broch-Due (2000:11) points out:

Africa is viewed from a variety of different historical and cultural locations. Each represents a dominant perspective, a discursive site on the long historical trajectory of western engagement with Africa from the early era of exploitation to the contemporary one of „aid“.

This section thus discusses some of the literature on the various historical western views of nature and wilderness and attempts to deconstruct these views further, in order to expose some of the hidden processes and histories that lie within them.

2.3.1 Colonial Interactions with African Nature

As Cronon (1995) shows, the idea of getting back to nature and escaping to a wilderness area is a fairly new phenomenon. An examination of history indicates that nature and wilderness has not always been ascribed the same meaning. “As late as the eighteenth century, the common usage of the word „wilderness“ in the English language referred to landscapes that carried adjectives such as „deserted“, “savage“, “desolate“, “barren” – in short, a “waste“, the word’s nearest synonym” (Cronon, 1995: 70). Through much of European and American history, nature and wilderness was seen as something that needed to be conquered and tamed. Cronon suggests that this view of nature stems from when Adam and Eve were driven from the Garden of Eden into the wilderness. A wilderness in this sense was somewhere one was sent against their will, a place where only through human labour, pain and toil could be redeemed. “Whatever value it might have arose solely from the possibility that it might be reclaimed and turned toward human ends – planted as a garden, say, or a city upon a hill. In this raw state, it had little or nothing to offer civilised men or women” (Cronon, 1995: 72).

Although this view of nature was true for much of the colonial period, it slowly changed as vast areas of the globe, including North America and southern Africa, were colonised. Through time, what was once seen as a daunting obstacle to be conquered, slowly became something not too threatening – indeed, something that was vanishing and in need of protection (Cronon, 1995). This perception of a diminishing nature created a sense of nostalgia, a longing for a time that had passed. As Soper (1995:189) points out in the historical writings about pastoral England in the late 19th and early 20th centuries, the changing landscape of rural England caused many people to mourn the destruction of a more natural way of life:

There has always been, it would seem, a Golden Age, a prelapsarian time-space of “nature“, whether conceived in directly mythical-theological terms as an absolute origin in Eden or more mundanely and historically, as the utopia of the erstwhile rural stability that has been „displaced“ by modernity: an „old country“ or “more

natural way of life“ that encroaches ever forward in memory like a green tide on the heels of the present.

It is clear that both the landscape and peoples“ perceptions of nature changed significantly as a result of industrialisation. While Karl Marx was writing against rampant capitalist exploitation; artists, poets and writers were producing work that glorified nature and the countryside which was under attack by capitalism and industrialisation (Cosgrove, 1984). Landscape paintings of rural England during this period reflected nature as something separate from humans and devoid of human labour. It is apparent, that as landscapes changed through human production, so did the ways in which people perceived these landscapes and nature and went about representing and preserving them.

Commentators such as Neumann (1996 and 2000), Mackenzie, (1990) and Grove (1990) explore how this nostalgic view of nature and romanticism of a “lost Eden” by Europeans influenced the demarcation of natural landscapes and the creation of associated laws of controlling wildlife exploitation in England - and later in colonial Africa. Neumann (1996) examines how the aristocratic experiences with the landscape of rural England influenced conservationist ideas for preserving an idealised wild Africa. Aristocratic relations with nature during this period were largely determined through sport hunting, which was seen as an appreciation of nature and was a big part of the socialisation of the aristocratic class in England. The right to hunt game in England was restricted to landholders – about one in a thousand people in 1820 (Hopkins, 1985). Thus with the “diminishing „natural“ landscape”, the aristocratic leadership in England sought to protect their privilege and their nostalgic interactions with nature” by setting up private parks or emparkments (Neumann, 1996). As Cosgrove points out, “The implementation of the aesthetic ideal of these „naturalised“ private parks often meant the elimination of fields, pastures, roads and entire villages along with the norms and institutions which had secured common rights of access” (Cosgrove 1984, cited in Neumann, 1996:79).

Similar rules and relationships with nature were imported to colonial Africa. Neumann (1996) suggests that it was not only the push to conserve the nostalgic idea of a “lost Eden” that led to emparkment in England and later colonial Africa but that this was also due to the social, political and economic changes taking place in England during the 18th and 19th centuries. Europe and more specifically England were entwined in an empire that

was dependent on an overseas system of territorial control, economic exploitation and a socio-cultural vision (Said, 1978). Neumann (2000) draws a clear parallel between the historical processes of the emparkment activities which stripped rural dwellers of their subsistence ability in England and the subsequent colonisation and similar fate for rural communities in Africa. Through colonialism, the English landscape tradition was transferred to Africa, with serious consequences for local African people.

There emerged among the capitalist class of land owners a new way of seeing the landscape, which split the world into two spheres – land that was for practical (productive) uses and practices and land that was for aesthetic (consumptive) observation and practices. (Neumann, 2000:152).

During the 20th century there was a definite divide between British ruling class ideologies on whether to preserve African nature through the formation of national parks or to intensify agricultural production. It is clear that nature was perceived differently by the various ruling class divisions at the time (Neumann, 2000). There was a strong drive by many aristocrats to preserve African wildlife and to fulfil the aesthetic and romanticised dreams of Africa. This was despite many of the aristocratic preservation advocates having never visited Africa (Neumann, 2000). On the other hand, there were many who pushed for the development of Africa and saw wilderness areas as waste of agricultural land. These two directives, preservation or development were spatially segregated, and are a clear reflection of the particular ways of how the ruling class perceived these landscapes. Nature during this period was seen as something to be controlled to fulfil the aesthetic and commercial ideals of colonisers, this often meant the control of land and the local populations. The fact that human labour was denied in landscapes of consumption as conceptualised by the Europeans, meant a significant alteration of the land use and the land access for Africans living in these areas (Neumann, 2000). As such, national parks in many ways were not actually preserving nature as much as they were developing it or trying to control it to fit a particular (political, social, cultural or economic) ideology.

The point scholars such as MacKenzie and Neumann make is not that colonial conservation in Africa was exclusively based on the experiences of the British aristocracy in the early 20th century but that this period was critical in the development of an institutionalised global nature-preservation movement. The control over nature, either for aesthetic consumption or for production, must be recognised as an integral part of the

geography and history of empire, that conquest was often reinforced by social and cultural constructions of property, aesthetics and nature. There has been a great deal written on the development of national parks and the conservation movement in Africa (Carruthers, 1994; Cock and Fig, 2002; MacKenzie, 1988; Neumann, 2000), however, it is more important to note that the social constructions and representations of nature through history have had a very tangible effect on conservation practices and the way in which rural communities are in turn treated. As Pedynowski (2003: 738), highlights:

In a world with multiple realities of „nature“ that are constructed by diverse groups with differing motivations and access to power, decision-making in environmental management can become a contest over whose knowledge is „right“, or ... whose knowledge can produce the most powerful claim to the „truth“.

It is clear that nature was viewed differently by the European aristocrats, colonial administrators and local inhabitants, in many ways these varied perceptions are still true today.

2.3.2 Contemporary Interactions with African Nature

As we enter the 21st century, it is evident that with increasing populations and limited natural resources, globally there has been great concern for the state of the natural environment (Brown, 2006; Friedman, 2008; Fearn, 2010). Nature in modern society has become more sacred than ever before. As Cronon (1995) indicates, nature is seen even more so today as something that is diminishing and that is separate from humans and society. “Nature is an island in the polluted sea of urban-industrial modernity, the one place we can turn from our own too muchness” (Cronon, 1995: 69). Due to globalisation and the environmental movement, nature in the contemporary context is increasingly being associated with travel to remote areas, those areas untainted and in stark contrast to the degraded nature and impoverished culture of the West (Goldman, 2011). The increasing concern for the diminishing natural environment, coupled with the fact that tourists are far more mobile than ever before, nature tourism has become one of the largest industries and consumption markets in modern economies (Gibson, 2010; Markwell, 2001; Norton, 1996). As a result, an increasing number of foreign and domestic tourists are undertaking safari tourism in order to escape modernity and experience the bush or authentic African Nature (Markwell, 2001). This is particularly apparent with the

emergence of private wilderness areas marketed to tourists as part of the African wilderness.

Tourists are offered an escape from the jaded, human-made places of civilisation and invited into “pristine” nature, a preserved Eden and a place where one can almost escape reality. However, one needs to be far more critical of the images presented through marketing and the highly constructed wilderness spaces. “Natural spaces such as game reserves need to be located in their political and historical context” (Brooks, 2000: 63). What is often portrayed as a wilderness, an area that has been untouched and suspended in time, is most often a romanticised truth that is hiding the history and political underpinnings of the area (Brooks, 2000; Goldman, 2011).

This construction of nature and the other is no new phenomenon as has been mentioned. Contemporary perceptions of African nature and culture are in many ways still rooted in colonial interactions with Africa. There remains a “continuation of a cultural politics of domination...based on a European social construction, dating from the first white colonisers” (Waite, 1996, cited in Bass, 2002: 97). PGRs and “wilderness areas” are highly constructed landscapes in both the discursive and physical sense. Tourists are presented with an “untouched nature”, separate from human interference and preserved in its God given state. However, if these areas are seen to be devoid of human intrusion, what does this mean for local inhabitants? These perceptions often frame the context of how rural communities are treated. This section explores some of the literature on the contemporary views of African nature, with particular emphasis on the ways in which private wilderness areas are constructed by their owners, perceived by tourists and how this may cause a number of implications for local communities.

Discursive Production

Postcolonial scholars such as Bass (2002); Norton (1996); and Rasool and Witz (1996), have shown particular interest in highlighting the political, social and cultural ramifications of tourism, particularly in the construction of images and the representation of nature. “As tourist places have become progressively integrated into the culture of consumption, cultural and environmental images have been constructed and manipulated through advertising, packaging and market positioning” (Norton, 1996: 358). These

marketing materials include safari brochures, websites, television advertising and documentaries, which all play a role in shaping our consciousness of places, cultures and nature.

Westerners and Europeans, influenced by marketing, the media, movies, etc and western imagery and perceptions of Africa, expressed in terms of the ultimate aesthetic icon of the lost Eden, travel to Africa in order to authenticate the paradoxical images that they have been presented with (Draper; Spierenburg; and Wells, 2004). This is particularly evident with the KwaZulu-Natal Tourism Authority (KZNTA) who is responsible for marketing the province and creating the appeal of wilderness spaces, ensuring that they cash in on a piece of the tourism industry (Bass, 2002). Bass (2002) investigates the representations generated by the marketing of KZNTA's "Kingdom of the Zulu" promotional literature. "Unsurprisingly, KZN is most visibly portrayed both as an idyllic utopian paradise and an untamed wild frontier where savage beasts and indigenous people exist in primitive forms" (Bass, 2002: 83). Central to the marketing of KZNTA is the same notion of colonialism which invites the tourist to experience this pristine natural beauty with its authentic Zulu culture. The "Kingdom of the Zulu" branding concept pushes the image of the traditional Zulu as it is a worldwide recognisable image. It plays on the idea of a wild African Kingdom, suspended in time, with primitive people living in rural settings with wild animals (Bass, 2002). It almost challenges the tourist to an adventure and implies that they will be entering "pristine" nature. This idea of "primordial" and "pristine" wilderness is central to the marketing of most wildlife regions and is blatantly evident in the KZNTA marketing campaign and the PGR case studies selected in this dissertation.

Norton (1996), looks at the perceptions of tourists before, during and after their East African wildlife experience. Norton (1996) explores how tourists develop their own experientially-based interpretations of East Africa, drawing on knowledge of other texts, personal experience and social dialogue, from the period of anticipation prior to the holiday, the safari experience itself and during subsequent reflection. Norton conceptualises tourism as a process of place construction and negotiation, which occurs through encoding and decoding practices employed respectively by tourism marketing managers and tourists, reproducing racial-ethnic mythologies and environmental mythologies. Norton inserts tourism into a "circuit of culture" model of cultural reproduction, which indicates the roles of tourism marketing and the experience of the

tourist in the development of popular understandings of nature and culture. Norton argues that nature is abstracted from itself and moulded into a shape by and for humans, that the discourses which are reproduced within and circulate through the tourism industry are not insubstantial or short-lived, but rather inform us of our identities and sense of place, they are modern ways of defining reality (Norton, 1996). This reality is born from tourists' interpretations of nature and culture, which are unable to draw on hidden discourses, including those which contradict the primeval nature archetype, such as the early history of civilisation, as well as those which would expose historical and contemporary struggles to define and utilise the nature of game reserves (Norton, 1996).

Physical Construction

Due to the various discourses presented to tourists and the negotiated reality of what is expected by tourists, the physical landscapes of wilderness areas often needs to be manipulated in order to reflect a wild Africa. This often means the removal of any trace of modernity, careful use of architecture in the construction of lodges, the manipulation of ecosystems and the removal/exclusion of local people in order to enhance the overall wilderness experience of the tourist.

The physical landscape and ecosystems of game reserves are often stage-managed to ensure that tourists' wilderness experience fits with their perceptions. Examples of this include bush thinning and vegetation clearance in order to allow for better game viewing for tourists and the introduction of extralimital (non-native) species. One of many examples of the introduction of extralimital species includes the Giraffe (*Giraffa camelopardalis*) which is not endemic to the Eastern Cape Province, yet has and continues to be introduced to the region despite recognised negative impacts (Parker and Bernard, 2005). This is also the case with numerous game reserves and the introduction of the Big Five.⁽¹⁾ Despite the known negative impacts of the introduction of such species, game reserves are controlled in order to present the picture of an African wilderness that tourists expect. This is despite the suitability of the land use, carrying capacities of the reserves, local habitats or the fact that people reside or depend on the land (Parker and Bernard, 2005).

(1) The phrase Big Five game was coined by white hunters and refers to the five most difficult animals in Africa to hunt on foot. The collection consists of the lion, the African elephant, the Cape Buffalo, the leopard and the rhinoceros (La Harpe, 2001).

“This movement to establish game reserves, despite the people living on the land took place around the second and third decades of the twentieth century, when global attitudes to wildlife began to change; sport hunting gave way to wildlife leisure tourism, performed with a camera rather than a gun” (Brooks, 2005: 222). Instead of hunting and collecting taxidermies of animal carcasses on their walls, tourists now seek to adorn their walls with pictures (Rassool and Witz, 1996). Although the game hunting industry of today is still extremely popular, it is only really conducted on a private scale and tourists are rather invited to hunt an animal with their camera in hand. However, this perpetuates the images or constructions of nature that these tourists seek to authenticate.

In this view, local people tend to be divided into good and bad natives, depending how close they are to nature (Neumann, 2000). The closer they are to nature the better, and the greater their rights are to remain in the area and benefit economically from the conservation initiatives. The more modern they are, the more they pose a threat to the success of nature conservation and the further they should be kept from these conservation areas. The bad native is naturally evicted. According to Draper, Spierenburg and Wells, (2004), throughout the history of game reserves in order for game to exist and tourism to be sold, certain people needed to be evicted. Good communities have to live up to certain parameters which are formulated by the (western dominated) (inter)national conservation agencies. They must constantly show a state of purity which in western thought means that they have to show a certain primitivism and simplicity. Draper, Spierenburg, and Wells (2004) illustrate this point with an example of a San community that lost their land to conservation (the Kalahari Gemsbok National Park) and after a claim they were given it back, on condition that they continued with their traditional lifestyle of being barefoot hunter gatherers in loin cloths. While this community managed to remain on the land, another group of San who had lost their land to commercial farming and had ended up as impoverished farm labourers, having lost all their ties and possibilities to return to hunter gatherer lifestyle, were denied a claim to their land. They had lost their cultural characteristics associated with the San and the pristine desert landscape.

“For peasant populations, land can comprise more than a means of livelihood. Ownership of, or access to land carries with it status, political power, honour and dignity” (Allen and Brennan, 2004: 73). Thus the choice to conserve wildlife is wrought with political and social ramifications for the local communities that reside in these areas. In addition to this,

with the local population being forced into smaller areas, it has serious impacts on the land surrounding the conservation areas and the way the locals are required to live. This makes one question the portrayal of the local people removed off game reserves and even the communities that surround game reserves whether they are really being uplifted due to the economic activities of tourism or whether they are merely forced to act in a certain way, manipulated by western perceptions. Due to social pressures and of course financial gain, local communities do often allow themselves to be represented in this way. These choices, as Bass (2002) points out, are seldom free and are determined in most cases by poverty. Local communities are often forced into living a certain way, their culture seems to be determined by western perceptions and their livelihood strategies have had to adapt as they have in many cases been forcefully removed.

Three key points need to be made about contemporary perceptions of nature and the emergence of PGRs. First, they are constructed landscapes in both the physical and discursive sense - a fact that is often obscured for tourists and others by their new status as wilderness, as if these are pristine areas untouched by humans (Brooks and Spierenburg, 2010b). Second, these spaces must succeed in the marketplace: private wildlife production relies on international and relatively rich nature tourists coming to South(ern) Africa to enjoy an unforgettable wilderness experience. As a result, the relations between hosts and guests on PGRs are largely shaped by the (perceived) demands of the market. Thirdly, the emergence of PGRs clearly has implications for the rural poor.

2.3.3 The Ecotourism Movement

Tourism and its impact on the environment, economies and culture of host societies has received much attention due to the rise in the environmental and social rights movements. “Community-based conservation (CBC) in general and ecotourism in particular arose to correct human injustices and social impacts wrought by a prior model of protected area management that subordinated resident peoples’ welfare and rights, and local economic development, to environmental preservation” (Belsky, 2000: 285). Over the last two decades, the ecotourism sector has rapidly grown and evolved from a pastime of a select few, to a range of activities that encompasses many people pursuing a wide variety of interests in nature (Mowforth and Munt, 2005). Although ecotourism along with sustainability have been popular concepts in recent years, there still remains little

consensus on what ecotourism really means, this may be due to the fact that it may take on a variety of forms and that it includes a wide assortment of tourists. Ecotourism is defined as “Responsible travel to natural areas that conserves the environment and improves the well-being of local people” (Buckley, 2009: 2). This means that those who implement and participate in ecotourism should encompass all of the following principles and characteristics in order to be recognised as part and parcel of ecotourism:

1. The main motivation of ecotourism should be the observation and appreciation of nature as well as the traditional cultures prevailing in the natural areas. In addition to this it should seek to minimise all negative impacts of tourism.
2. It should contain educational and interpretational features by building environmental and cultural awareness and respect. Thus providing positive experiences for both visitors and hosts.
3. It should ensure direct financial benefits for conservation and empowerment of local people.
4. It should minimise negative impacts upon the natural and socio-cultural environment by raising awareness and sensitivities of host countries' political, environmental, and social climates. (Honey, 2008: 134).

In the last couple of decades, CBC and ecotourism has become almost a mantra for conservationists in Southern Africa and other parts of the Third World (Owen-Smith, 2009). Ambitious claims have been made for the effectiveness of resource management at the local level and the development of a community-based natural resource management (CBNRM) approach to achieving real conservation goals. The idea that devolution of control should where possible replace the old top-down, “fences and fines” approach is now quite widely accepted in the conservation world, and certainly donor organisations like to see a community-based conservation component to any project before they are willing to fund it. A number of southern African states, in particular Namibia, have taken up CBNRM as their official conservation policy, especially in communal areas (Owen-Smith, 2009).

Since the early 1990s, across much of Southern Africa, community-orientated tourism and conservation initiatives have replaced earlier fortress conservation models and policies, which excluded local communities and dispossessed them of their land. According to Hulme and Murphree (2001: 320) there are three particular standpoints to these new

bottom up ideas of conservation, which are woven together in different ways by theorists, policy-makers and managers of the African environment. These include:

1. That conservation should involve the community rather than being purely state-centric.
2. The concept of sustainable development has promoted the notion that the things to be conserved (species, habitats or biodiversity) should be viewed as exploitable natural resources that can be managed to achieve both development and conservation goals. (Wildlife utilisation, rather than wildlife preservation might be best for conservation).
3. In keeping with the neo-liberal thinking that dominated the late twentieth century, are ideas that markets should play a greater role in shaping the structures and incentives for conservation.

Yet despite the theory and the rhetoric, CBC and ecotourism initiatives face a number of challenges. While ecotourism is supposed to follow the principles and characteristics, highlighted above, in order to ensure environmental, social, cultural, political and economic benefits to the host communities, educate tourists etc (Buckley, 2009), it is often falls short, this is particularly apparent with game reserves which are often considered ecotourism establishments.

The effects of ecotourism and the construction of African nature are particularly evident in Brooks (2005), where an exploration of the constructions of South African nature and the material imperatives that influenced game reserve management in Zululand was taken. Brooks (2005) takes a historical perspective of the Hluhluwe-Mfolozi game reserve in Zululand. In this study, it was evident that in the creation of the reserve, the local people that had lived in the area for generations could not be part of this new purified “space of nature” and were forcefully removed. However, the Hluhluwe-Mfolozi Reserve in many ways would be considered in today’s terms as ecotourism. This is despite the history of the reserve and the exercised control over the landscape which according to Brooks (2005: 220), “enhanced social controls and a new brutal geography of forced removal that was implicated in the (re)creation of Hluhluwe as a romantic space in which tourists could experience wild nature and an „unspoilt“ African landscape.”

Another issue is that of representation with ecotourism ventures. Who has the power to represent “the community”? Do agreements struck with local chiefs constitute CBC? Does

a CBNRM approach mean that power relations and power hierarchies no longer distort outcomes? Assuming that control really is devolved to the local level, does such a devolution really bring about better conservation practices? As Ribot (2000) illustrates in her case study in Eastern Senegal, local control does not automatically mean community control, as well as local rule does not necessarily mean community participation and democracy. “Villages are highly stratified and elites – such as village chiefs – often make decisions that are not in the interest of the community as a whole” (Ribot 2000: 135). As in Ribot’s case study and in many other parts of Africa, misrepresentation and overarching political structures often reinforce past political struggles, and intensify injustice. Due to the fact that wilderness and culture are viewed from engrained colonial perspectives, compounded by the images presented by the various marketing campaigns, ecotourism needs to fit into these constructions. As a result there are numerous negative impacts on the environment and the local people despite the principles behind ecotourism.

There are also numerous economic impacts of viewing wildlife and local societies in this regard, which makes one question whether they really receive direct financial benefits. Due to the fact that in order for the community to be involved in the conservation efforts, they are to either sell their labour, performing inconsequential work (such as labourers, and kitchen staff) or as Draper, Spierenburg and Wells (2004) point out, they are to be the good natives and sell their traditional culture. This may be in the form of dancing on the side of the road or selling traditional drums and weaponry etc to the ecotourist, again which affects the environment. With these curios, local resources, for example old growth forests for the making of drums, are exploited for the tourist to take home memorabilia of wild and authentic Africa. The consequences are that the poor sell cheap, that they are blamed for the degradation of resources, and that they have little or no control over the resource at the critical junctures where it has greater economic value (Zerner, 2000). Most ecotourism ventures, particularly those of exclusive game reserves that cost upwards of R3,000.00 per person per night, are owned by foreigners or the elite. Although labelled as ecotourism, the local community does not really get to benefit directly or very substantially from them.

Significant attempts have been made to try to integrate protected areas with poor people who have usually been (and in some cases still are) excluded from these areas. Ecotourism is supposed to provide a better and more responsible form of engagement with both

communities and the environments in which they live. On the ground almost all game reserves have developed community initiatives, however, local communities are still adversely affected. A great deal has been written on the topic from a social justice perspective (Dodson, 2002; McDonald, 2002; Zerner, 2005) and it is clear that ecotourism and PGRs in this case have a magnitude of negative impacts on local rural communities.

2.4 CONCEPTUAL FRAMEWORK: SUSTAINABLE LIVELIHOODS APPROACH

As discussed above, the establishment of PGRs is bringing about a produced nature that is being commodified and sold instead of the more traditional agricultural commodity of cattle. The main focus of this research is to establish how this produced nature is shaping/shifting rural landscapes and the possible effects for rural communities and their livelihood strategies. Is producing new forms of nature also producing new forms of poverty and entrenching spatial and socio-economic marginalisation? In order to quantify the nature of this marginalisation, and provide a qualitative analysis of the reality of ex-farm dweller and community responses to these land use changes, this research adopted the Sustainable Livelihoods Approach (SLA) as a conceptual framework within which to collect and analyse the data. This section outlines this framework.

2.4.1 Assessing Rural Livelihoods

The fundamental question here is how best to understand and analyse the livelihood structures and strategies of rural households. In the southern African context as in other „developing“ countries, poor rural households survive by engaging in a diverse set of activities and interdependencies amongst their kin group or community. Some of these activities may involve an exchange process in which services are performed or goods produced which may be exchanged for cash or for recipient goods and services (May, 1996). These may range from farming to trading in local goods and services and often even migration to distant cities. Obtaining a livelihood, in such a context, means more than merely being employed, but rather being a part of a complex set of interrelations and varied activities. In order to understand these complex interrelations, various methods of assessing rural livelihoods have been adopted by researchers and development agencies concerned with poverty reduction, sustainability and livelihood strategies. According to Ellis (2000: 18), “most approaches have in common that they regard the asset status of

poor individuals or households as fundamental to understanding options open to them, the strategies they adopt for survival and their vulnerability to adverse trends and events”.

The approach selected here is a conceptual tool developed by the Department for International Development (DFID) as a guide for collecting, analysing and interpreting data on rural livelihoods. Called the SLA, this approach was chosen due to it being the most comprehensive and widely utilised method of measuring and understanding rural livelihoods. The DFID SLA has been extensively adopted in a variety of contexts in development assessments throughout the world. The SLA is founded on a belief that people require a range of assets to achieve positive livelihood outcomes; no single category of assets on its own is sufficient to yield all the many and varied livelihood outcomes that people seek (DFID, 1999). This is particularly true for poor people whose access to any given category of assets tends to be very limited. As a result they have to seek ways of nurturing and combining what assets they do have in innovative ways to ensure survival. According to Chambers and Conway (1991:6):

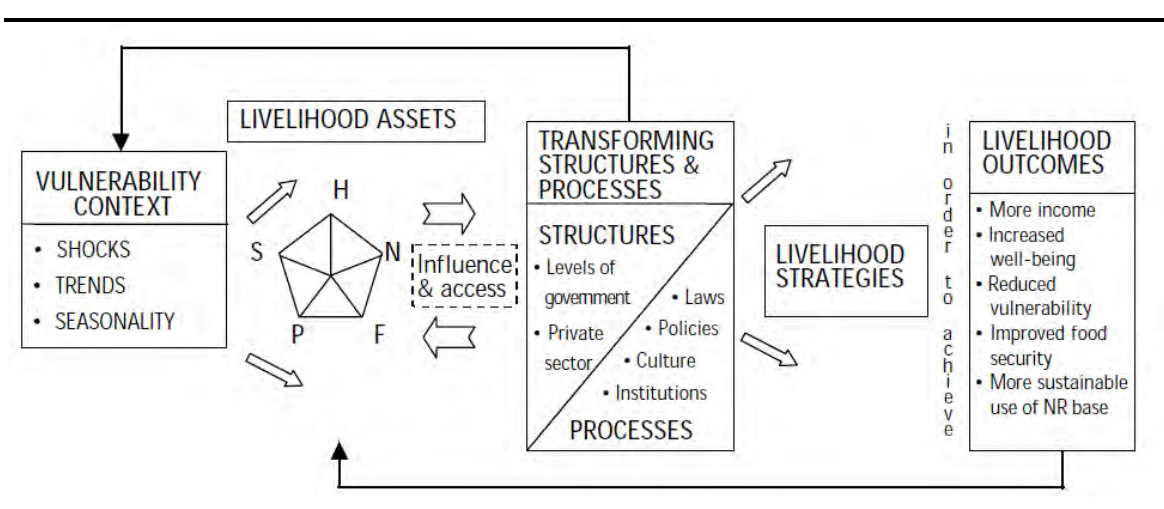
A livelihood comprises the capabilities, assets (including both material and social resources) and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stresses and shocks and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resource base.

It should be noted that there are a number of frameworks that may be used to analyse livelihoods. These include the Sustainable Livelihood Framework (SLF) (Carney, 1998; Scoones, 1998), the Framework for Thinking about Diverse Rural Livelihoods (Ellis, 2000), the Capital and Capabilities Framework (Bebbington, 1999), and the Sustainable Livelihoods Diamond (UNDP, 1999). These frameworks have different emphases rather than fundamental conceptual differences. They all attempt to integrate assets, constraints, and human capabilities in a logical and comprehensive manner to analyse the status, form, nature, and condition of livelihoods over space and time (Chimhowu and Hulme, 2006). The SLA has been the most popular partly because of its robust analytical ability and also because of its widespread promotion by donor agencies such as the World Bank (Scoones, 1998). DFID has published numerous guidance sheets on the SLF and the use of livelihood assets in determining livelihood outcomes.

2.4.2 The Sustainable Livelihoods Framework

Within the SLA, the SLF (Figure 2.1) aims to help understand and analyse the livelihoods of the poor. The framework presents the main factors that affect people's livelihoods, and typical relationships between these. "The SLA does not work in a linear manner and does not try to present a model of reality. Its aim is to help stakeholders with different perspectives to engage in structured and coherent debate about the many factors that affect livelihoods, their relative importance and the way in which they interact" (DFID, 1999). The framework thus attempts to provide a way of thinking about the livelihoods of poor people and how they operate in a context of vulnerability. Within this context, they have access to certain assets or poverty reducing factors. These gain their meaning and value through the prevailing social, institutional and organisational environment. This environment also influences the livelihood strategies that are open to people in pursuit of beneficial livelihood outcomes that meet their own livelihood objectives (DFID, 1999).

Figure 2.1 Sustainable Livelihoods Framework



Source: DFID, 1999

The Vulnerability Context

The Vulnerability Context frames the external environment in which people exist. People's livelihoods and the wider availability of assets are fundamentally affected by critical trends as well as by shocks and seasonality (as seen in Table 2.1) – over which they have limited or no control (DFID, 1999).

Table 2.1 Vulnerability Context

Trends	<ul style="list-style-type: none"> • Population trends • Resource trends (including conflict) • National/international economic trends • Trends in governance (including politics) • Technological trends
Shocks	<ul style="list-style-type: none"> • Human health shocks • Natural shocks • Economic shocks • Conflict • Crop/livestock health shocks
Seasonality	<ul style="list-style-type: none"> • Of prices • Of production • Of health • Of employment opportunities

Source: DFID, 1999

The factors that make up the Vulnerability Context are important because they have a direct impact upon people's asset status and the options that are open to them in pursuit of beneficial livelihood outcomes (DFID, 1999). This context is the part of the framework that lies furthest outside people's control. The shift in land use from traditional forms of agriculture to PGRs may be one example of a trend that largely sits outside of the control of local communities, possibly causing a context of vulnerability.

Livelihood Assets

This view tends to accommodate most of the aspects that are significant in an analysis of the livelihood systems of the poor and in sustaining any development intervention. This is particularly true for poor people whose access to any given category of assets tends to be very limited. As a result they have to seek ways of fostering and combining what assets they do have in innovative ways to ensure survival (May, 1996) According to Warner (2002), a range of livelihood assets are needed to achieve positive livelihood outcomes, no single asset endowment sufficiently provides the varied livelihood outcomes that people require.

The Livelihoods Asset Pentagon

The livelihoods pentagon (Figure 2.2) lies at the centre of the livelihoods framework. The shape of the pentagon is intended to show schematically the variation in people's access to

assets. As seen in Table 2.2, these assets are made up of five forms of capital (namely, human, social, natural, physical, and financial).

Table 2.2 Pentagon Assets

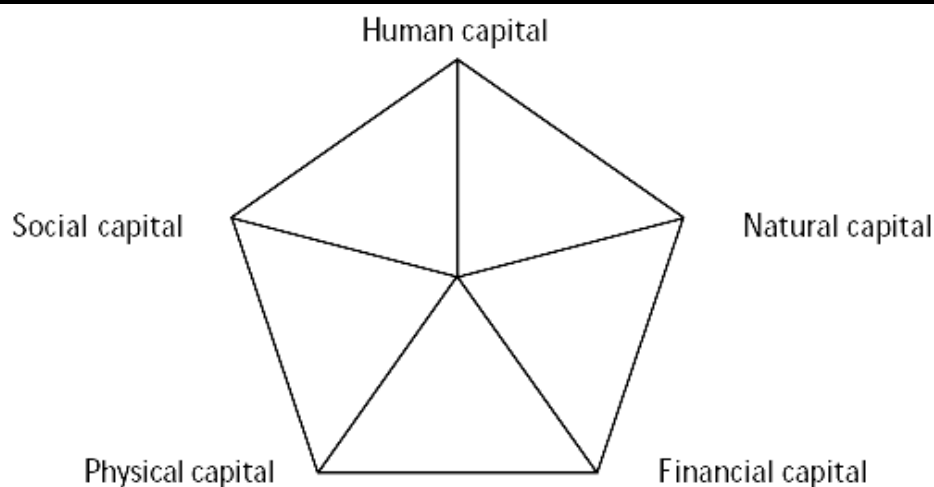
Asset	Definition
Human Capital	Represents the skills, knowledge, ability to labour and good health that together enable people to pursue different livelihood strategies and achieve their livelihood objectives.
Social Capital	The social resources upon which people draw in pursuit of their livelihood objectives. These are developed through networks and connectedness; memberships of a more formalised group; and relationships of trust, reciprocity and exchanges that facilitate co-operation, reduce transaction costs and may provide the basis for informal safety nets amongst the poor.
Natural Capital	Natural capital is the term used for the natural resource stocks from which resource flows and services (for example nutrient cycling, and erosion protection) useful for livelihoods are derived.
Physical Capital	Physical capital comprises the basic infrastructure and producer goods needed to support livelihoods. These may include affordable transport; secure shelter and buildings; adequate water supply and sanitation; clean, affordable energy; and access to information (communications).
Financial Capital	Financial capital denotes the financial resources that people use to achieve their livelihood objectives. This may include available stocks (saving in the form of cash, bank deposits or liquid assets such as livestock and jewellery) and regular inflows of money (income, pensions, child grants or other transfers from the state).

Source: DFID, 1999

An individual's assets are constantly changing, therefore the pentagon is constantly shifting and changing shape. The idea is that the centre point of the pentagon, where the lines meet, represents zero access to assets while the outer perimeter represents maximum access to assets. On this basis different shaped pentagons can be drawn for different communities or social groups within communities. If someone has secure access to land (natural capital) they may also be well-endowed with financial capital, as they are able to use the land not only for direct productive activities but also as collateral for loans. Similarly, livestock may generate social capital (prestige and connectedness to the community) for owners while at the same time being used as productive physical capital and remaining, in itself, as natural capital.

In order to develop an understanding of these complex relationships it is necessary to look beyond the assets themselves, to think about prevailing cultural practices and the types of structures and processes that transform assets into livelihood outcomes (DFID, 1999). In this study it is intended that the utilisation of the SLA will assist in understanding the broader structures that affect rural livelihoods and to understand the implications the land use shift from commercial agriculture to game reserves has had on rural livelihoods.

Figure 2.2 Livelihoods Pentagon



Source: DFID, 1999

Transforming Structures and Processes

The transforming structures and processes within the livelihoods framework are the institutions, organisations, policies and legislation that shape livelihoods. Structures in the framework would include organisations, both private and public that set and implement policy and legislation, deliver services, purchase, trade and perform all manner of other functions that affect livelihoods. In the case of this research these would be the Umkhanyakude District Municipality, and other key role-players such as the Department of Environmental Affairs (DEA), Ezemvelo-KZN Wildlife (the provincial conservation authority) and private sector conservation and tourism bodies. This would also include the legislative and policy framework surrounding conservation and land use. According to DFID (1999), these structures effectively determine:

- Access (to various types of capital, to livelihood strategies and to decision-making bodies and sources of influence);
- The terms of exchange between different types of capital; and
- Returns (economic and otherwise) to any given livelihood strategy.

Livelihood Strategies

Livelihood strategies comprise the range and combination of activities and choices that people undertake in order to achieve their livelihood goals. They have to be understood as part of a dynamic process in which people combine activities to meet their various needs at different times and on different geographical or economical levels, possibly even differing within a household (DFID, 1999). In the framework, livelihood strategies are seen as directly dependent on asset status and transforming structures and processes. When considering livelihood strategies and issues connected to the SLA in general it is important to recognise that people compete (for jobs, markets, natural resources, etc.), which makes it difficult for everyone to achieve simultaneous improvements in their livelihoods (DFID, 1999). The poor are themselves a very heterogeneous group, identifying different priorities in a finite and therefore highly disputed environment. Compromises are often necessary. Application of the SLA allows the researcher to be sensitive to such issues.

Livelihood Outcomes

Livelihood outcomes are the achievements of livelihood strategies, such as *more income* (for example cash), *increased well-being* (for example non material goods, like self-esteem, health status, access to services, sense of inclusion), *reduced vulnerability* (for example, better resilience through increase in asset status), *improved food security* (for example increase in financial capital in order to buy food) and a *more sustainable use of natural resources* (for example appropriate property rights) (DFID, 1999). Outcomes help us to understand the 'output' of the current configuration of factors within the livelihood framework, they demonstrate what motivates stakeholders to act as they do and what their priorities are. According to Kollmair and Gamper (2002: 276):

Outcomes might give us an idea of how people are likely to respond to new opportunities and which performance indicators should be used to assess support activity. Livelihood Outcomes directly influence the assets and change dynamically their level - the form of the pentagon, offering a new starting point for other strategies and outcomes

2.5 CONCLUSION

This chapter has provided a background to some of the literature and debates surrounding the idea of nature in the human and natural sciences. It has highlighted in particular how nature has been perceived through history and how these perceptions have in many cases culminated in a variety of impacts to local communities. Looking specifically at how conservation practices have shifted over time, framing the modern tourism movement and the more recent shift from commercial agriculture to wildlife forms of land use. It has also presented a conceptual framework for the research in the form of the SLA, which was utilised to both collect and analyse the data on the livelihoods of the community of Ingwenya. *Chapter Three* provides background information relating to the study area in order to contextualise the research conducted. It focuses on the historical and current process of agrarian change and the production of nature within the study area.

3 CHAPTER THREE – BACKGROUND TO THE STUDY AREA

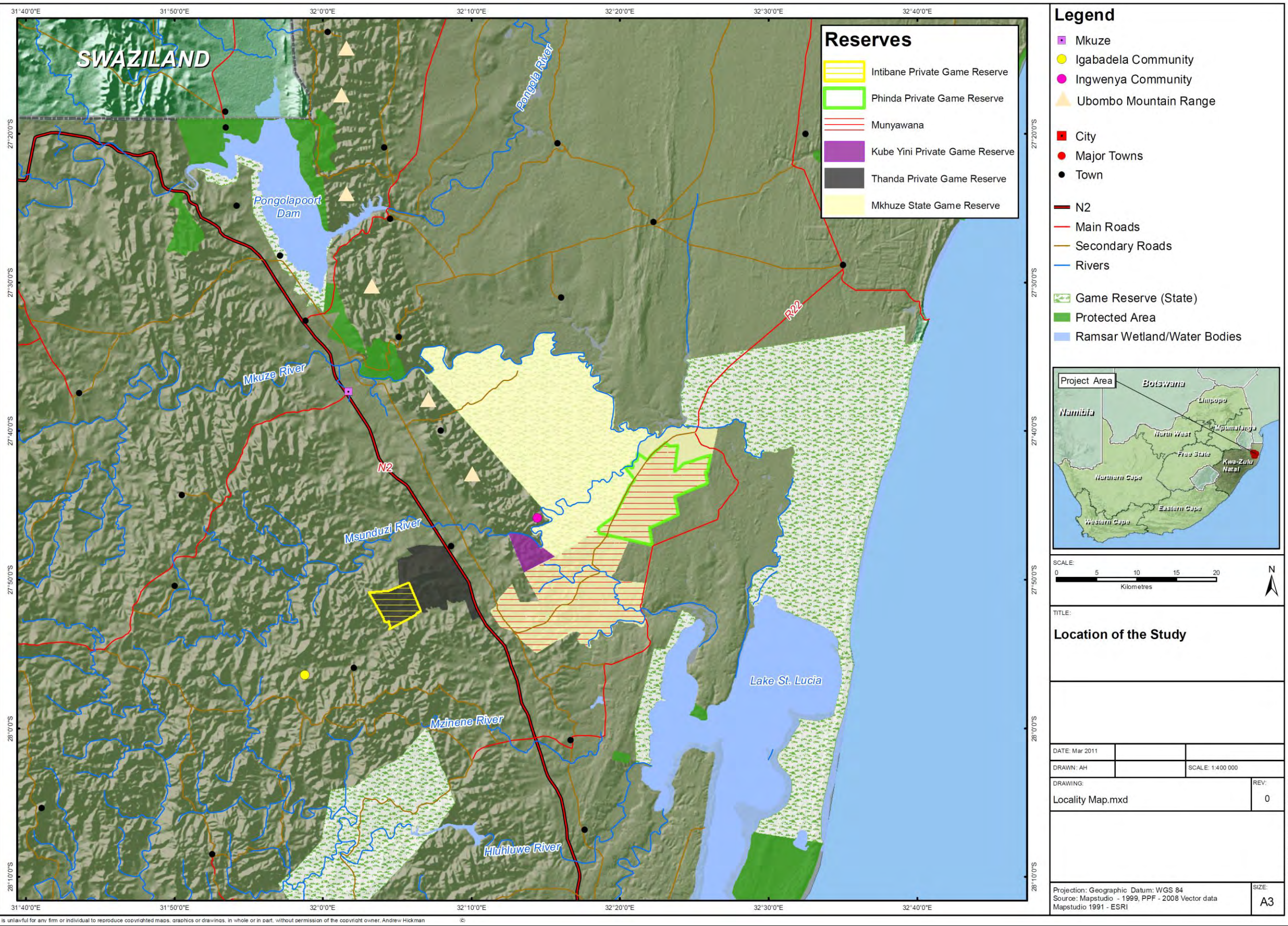
3.1 INTRODUCTION

Before approaching the question of the extent to which privatised forms of nature production may have impacted on the socio-economic position of ex-farm dwellers and others living on communal land in the community of Ingwenya, it is essential to first have an understanding of the current and historical context of the study area. This chapter thus details the current biophysical and socio-economic characteristics of the broader study area and explores the historical shift in land use over the past century. It discusses how historical nature-society interactions have played a part in creating the current physical and socio-economic landscape.

3.2 LOCATION OF THE STUDY AREA

The study area is located in the southern region of the Ubombo Mountains, approximately 30km south east of the town of Mkuze, in northern Zululand, KwaZulu-Natal, South Africa. (Figure 3.1). The study area falls within the Big Five False Bay and Jozini Local Municipality, contained within the Umkhanyakude District Municipality.

Figure 3.1 Location of the Study Area



3.3 BIOPHYSICAL CHARACTERISTICS OF THE STUDY AREA

In order to understand the context in which this land use change is taking place, it is important to understand the biophysical characteristics of the study area. Land use can be explained by the principle of comparative advantage which, put simply, means that each area tends to produce those commodities for which its conditions are most favourable. Land use change is shaped by economic, social, physical and biological factors that play a part in determining the comparative advantage of any area in producing livestock or crops (Kooman *et al*, 2008). Thus, this section gives a basic overview of the biophysical context within which the land use change has and is taking place.

3.3.1 Climate

According to King (2003) rainfall in the study area is strongly orographically related, with the elevated portions of the area experiencing greater rainfall than the more low-lying areas, except along the coast. The study area receives on average between 500 - 800mm per annum (King, 2003). However, this rainfall declines progressively with increasing distance from the coastline. Most of this rainfall occurs in the summer months, usually as a result of seaward moving convective thunderstorms. Annual evaporation (Symons pan) is estimated to be between 1400 – 1500mm (King, 2003).

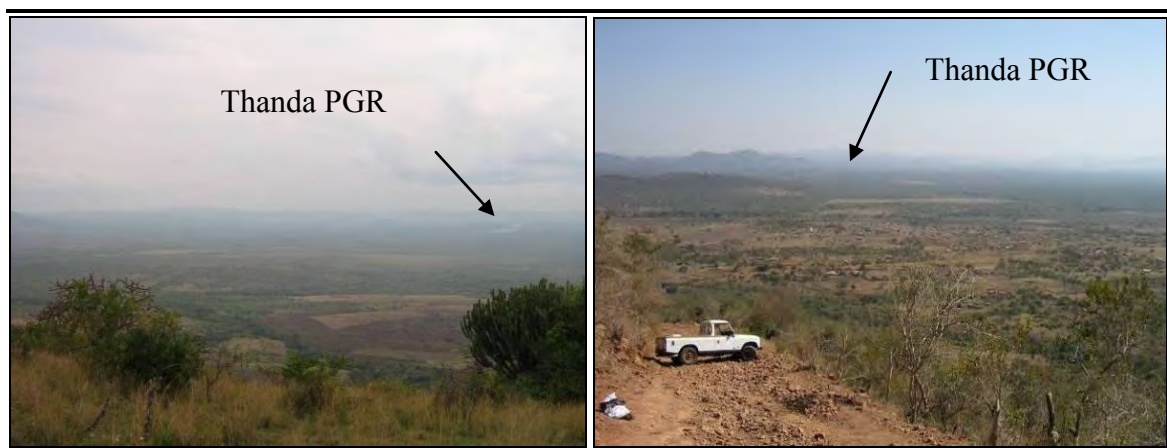
3.3.2 Topography

The land occupied by the community of Ingwenya is located within the Ubombo Mountain range, which is the southernmost reach of the Great African Rift Valley. As seen in Plate 3.1, the community is situated in an area that consists of steep undulating topography with a number of rocky outcrops and abrupt runoff. Due to the historical desirability of flat land for agricultural purposes (particularly to the east of the Ubombo Mountains) this mountainous area was designated native reserve land by the colonial authorities and remained a bantu area during the apartheid regime (Williams, 2010). Much of the surrounding flat land on the other hand was reserved for private occupation by white farmers (Buchanan, 1999). The four PGRs selected in this study are located on these flatter lands (Plate 3.2). The location of the Mkuze Game Reserve, however, was originally chosen in the early 1900s with the intention of being a game reserve and thus has a far more undulating topography than the PGRs.

Plate 3.1 View of the Topography within Community of Ingwenya



Plate 3.2 View from the Community of Ingwenya within the Ubombo Mountains towards Thanda Private Game Reserve (Note: the difference in topography)



3.3.3 Hydrology

There are a number of small non-perennial rivers located within the study area. The Msunduzi River is the only major river accessible to the community of Ingwenya. This river is a vital source of water for the region. Although it is dry for most of the year, the Msunduzi is ephemeral in that water may be found under the surface. The community regularly dig deep holes in the river bed to obtain water.

3.3.4 Geohydrology

Aquifers of this area are considered to be of the intergranular and fractured type and can have borehole yields between 0.1–0.5.0L/s (1:500 000 hydrogeological map 2730 Vryheid). As King (2003) highlights, with intergranular and fractured aquifers, water occurs in both the upper decomposed rock zone and the fractured, with fresh rock

formation below. These two zones are in hydraulic contact. Integranular aquifers are those which transmit groundwater in the voids between the individual grains. The weathered or intergranular zones may store important quantities of groundwater in the voids, but the water can only be economically abstracted from fractures in the underlying bedrock (King, 2003). Thus it is mainly from fractured rock that groundwater is obtained in the study area. There are a number of boreholes within the community of Ingwenya and all of the PGRs rely on groundwater as a major water source.

3.3.5 Geology and Soils

The geology within the study area includes acid to alkaline extrusive rocks, rhyodacite and rhyolite with intrusions of flow breccia. (1:250 000 geological series map 27½32 St Lucia). The extrusive igneous rocks of the Lebombo Group comprise rhyolite and basalt. Layered rhyolites and dacites of the Jozini formation form the prominent, relatively narrow, north south trending, easterly dipping feature of the Lebombo Mountains range on account of their relative resilience to erosion (King, 2003). The soils in the study area are, however, generally shallow and have low to moderate agricultural potential.

3.3.6 Agricultural Potential

The Umkhanyakude District Municipality has a total of 2,600km² (20.28% of the District) of high potential agricultural land (Umkhanyakude District Municipality, 2004). This land occurs in the Mtubatuba Local Municipality on the coastal plain to the south west of the Isimangoliso Wetland Park, and as a coastal strip northwards to the Mozambique border. The remainder of land comprises of medium (6,618km² or 51.63%) and low (3,100km² or 24.18%) potential agricultural land, respectively (Umkhanyakude District Municipality, 2004). The entire study area, except for certain parts of Phinda PGR, is considered to be of low agricultural potential.

The main forms of commercial agriculture within the Umkhanyakude District Municipality are sugar cane and timber, with cotton, sisal and pineapples also grown. However, at a total of approximately 275km², commercial agriculture occupies only 2.5% of the total area. Sugar cane is undergoing expansion in the Mkuze District with the construction of a pipeline for irrigation from the Pongola Dam (Umkhanyakude District Municipality, 2004). Traditional agriculture occurs on 1,310km² or 10.22% of the District,

however, this is largely small scale subsistence produce (Umkhanyakude District Municipality, 2004).

3.4 SOCIO-ECONOMIC CHARACTERISTICS OF THE STUDY AREA

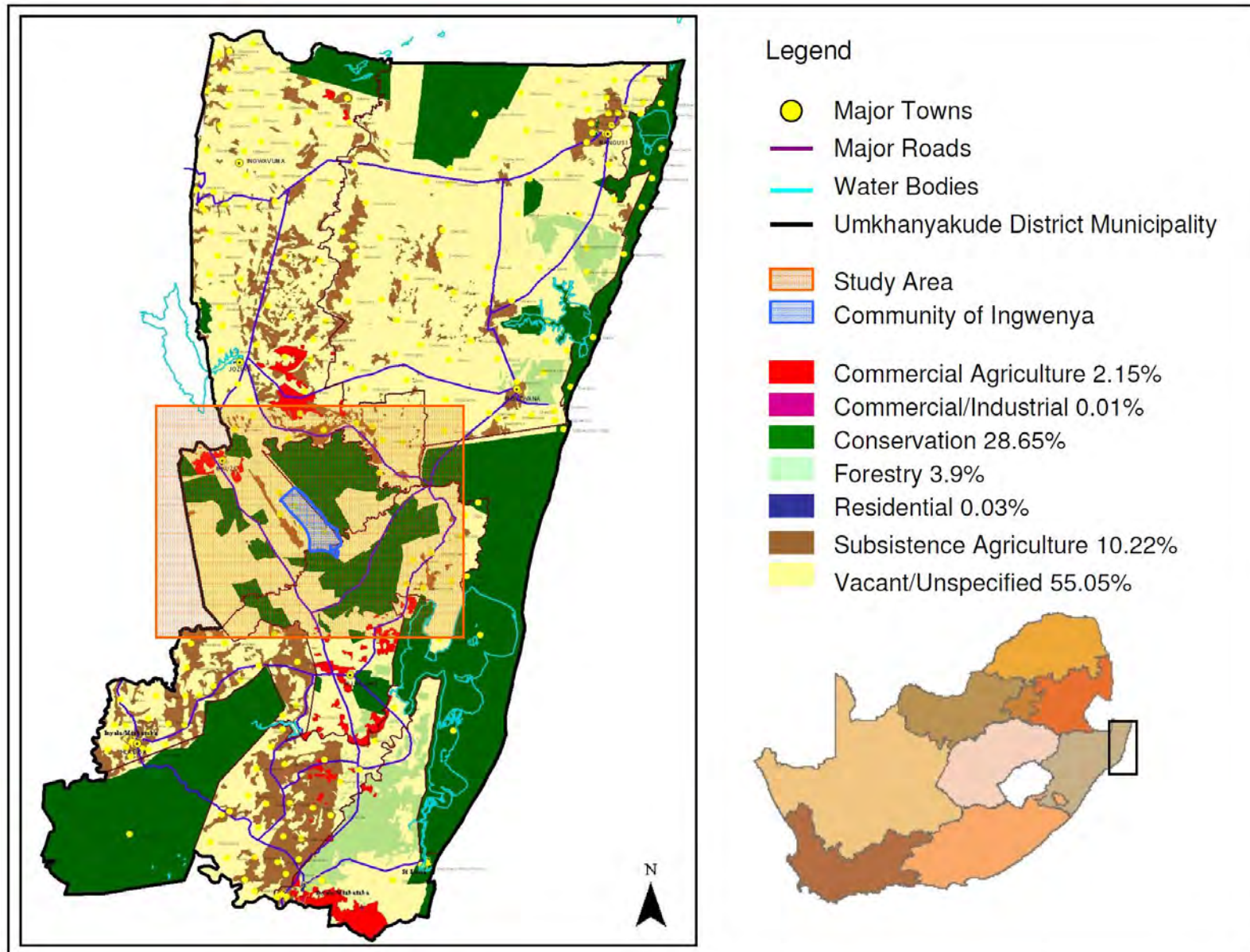
3.4.1 Current Land Use of the Study Area

As seen in Figure 3.2 overleaf, land use within the Umkhanyakude District Municipality currently has conservation areas (both state and private) covering a total of 28.65% of the Municipality, as compared with a far lower percentage for agriculture (commercial, subsistence and forestry) and commercial industrial areas consisting of a total of 16.27% and 0.01%, respectively (Umkhanyakude District Municipality, 2004). The majority of the area somewhat oddly indicated on this map as “vacant or unspecified” currently comprises of tribal (communal) land and rural communities. As is the case of the community of Ingwenya, these communities are surrounded by a multitude of both state (441,019ha) and private (69,395ha) reserves or conservation areas, as seen in Figure 3.2.

It is evident in both Figure 3.2 and Figure 3.3, that the community of Ingwenya is almost completely surrounded by either private or state owned game reserves. ⁽²⁾ In addition to farmers dropping their fences and joining land parcels to make game reserves, it is becoming more common that game reserves are dropping their fences as well in order to create bigger reserves. Locally examples would include the Munyawana (which includes Phinda, Mziki and Zuka), Thanda and Intibane and the Zululand Rhino Reserve. In addition, there are numerous other cases where farms are being purchased in order to link game reserves. Well known cases in other areas include: Gongolo Wildlife Reserve, Hluhluwe Umfolozi Game Reserve, Londolozi PGR and the Northern Tuli Block Game Reserve in Botswana (Brooks, 2005; Buchanan and Varty, 1966; Southern Africa Report Association, 2005). From a biodiversity and conservation perspective although this trend is obviously a great idea, this often has far reaching consequences for farm dwellers that reside on these farms or for neighbouring communities who in turn get geographically boxed in and marginalised by these hard boundaries.

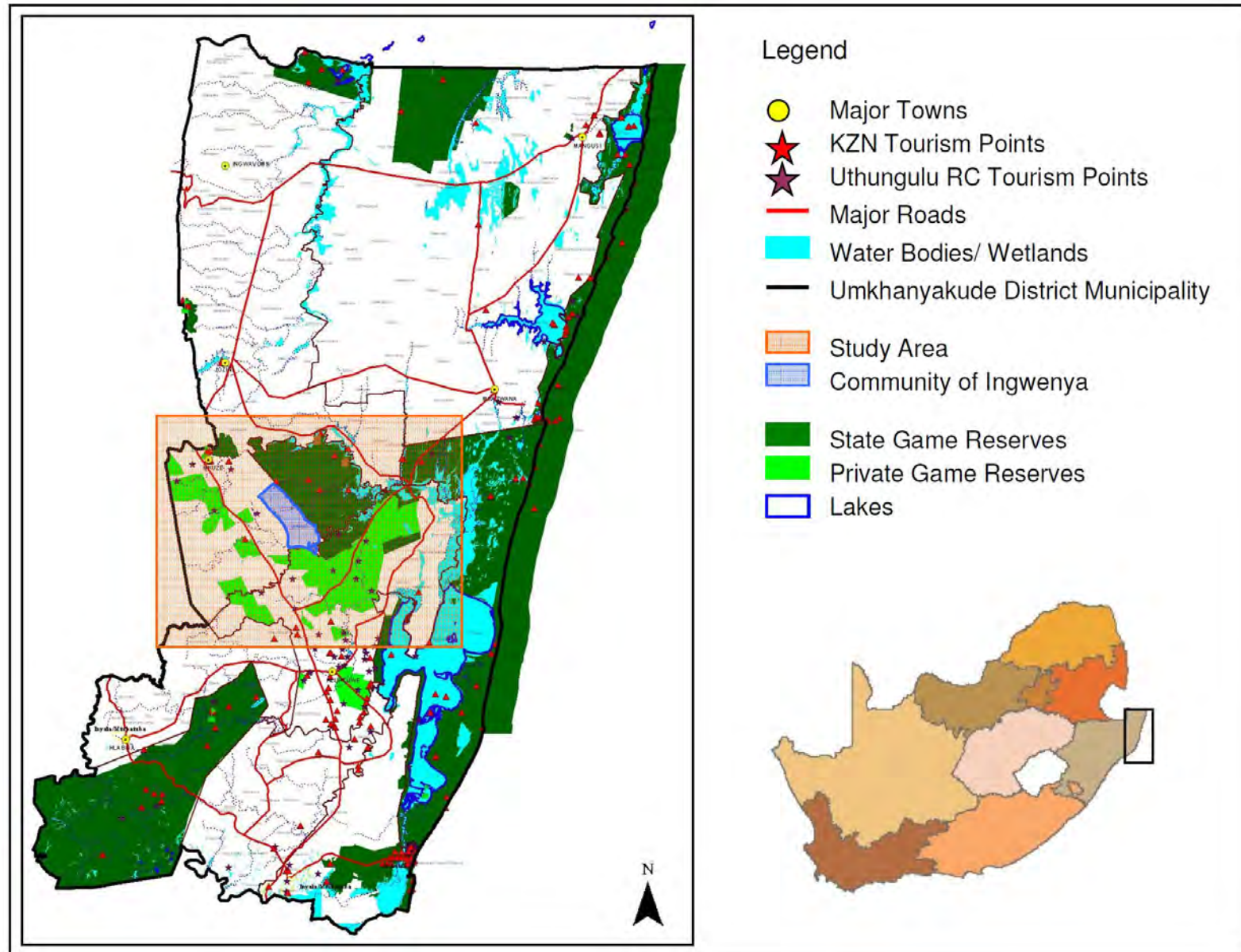
(2) It should be noted that the information presented in these figures was obtained from the Umkhanyakude District Municipality (2004), and the data utilised to produce these maps predates 2002. Since this date, numerous PGRs (including Thanda) have been developed. This is even more pronounced to date as there are a multitude of PGRs that are not indicated in these figures. Despite numerous attempts, this data was not made available to the researcher by the district municipality.

Figure 3.2 Land Use within the Umkhanyakude District Municipality



Source: Adapted from Umkhanyakude District Municipality, 2004 (scale 1:700, 000)

Figure 3.3 Private and State Owned Game Reserves within the Umkhanyakude District Municipality

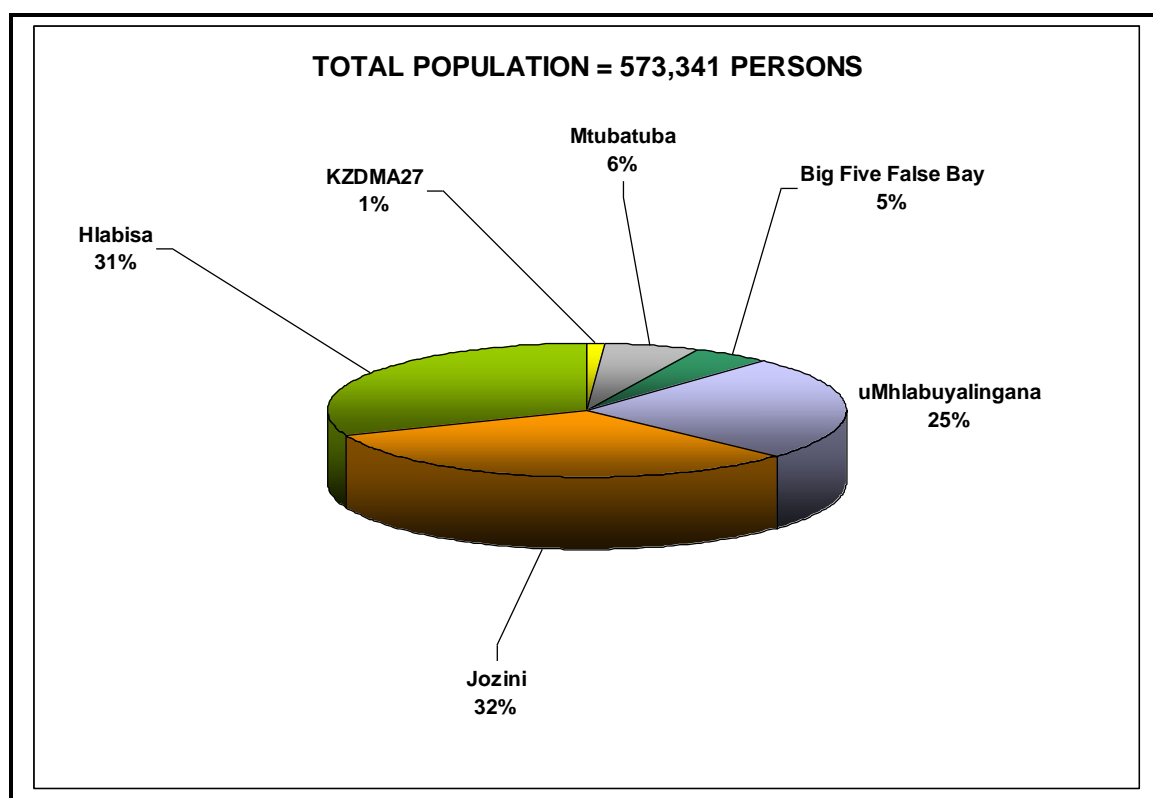


Source: Adapted from Umkhanyakude District Municipality, 2004 (scale 1:700, 000)

3.4.2 Population

As seen in Figure 3.4, the total population of the Umkhanyakude District Municipality is estimated to be in the region of 573,341 persons, 5% of which falls within Big Five False Bay (26,302 persons) and 32% (15,1683 persons) within Jozini Local Municipalities (Statistics SA, 2001).⁽³⁾ Between 1996 and 2001, the average growth rate for the District as a whole, was 2.79% (Statistics SA, 1996 and 2001). This is thought to be rapidly decreasing due to a number of possible macro trends which include the increased incidence and impact of HIV/AIDS and rural/urban migration to other areas of greater opportunity in the larger towns and cities.⁽⁴⁾

Figure 3.4 Total Population of Umkhanyakude District Municipality per Local Municipal Area



Source: Statistics SA, 2001

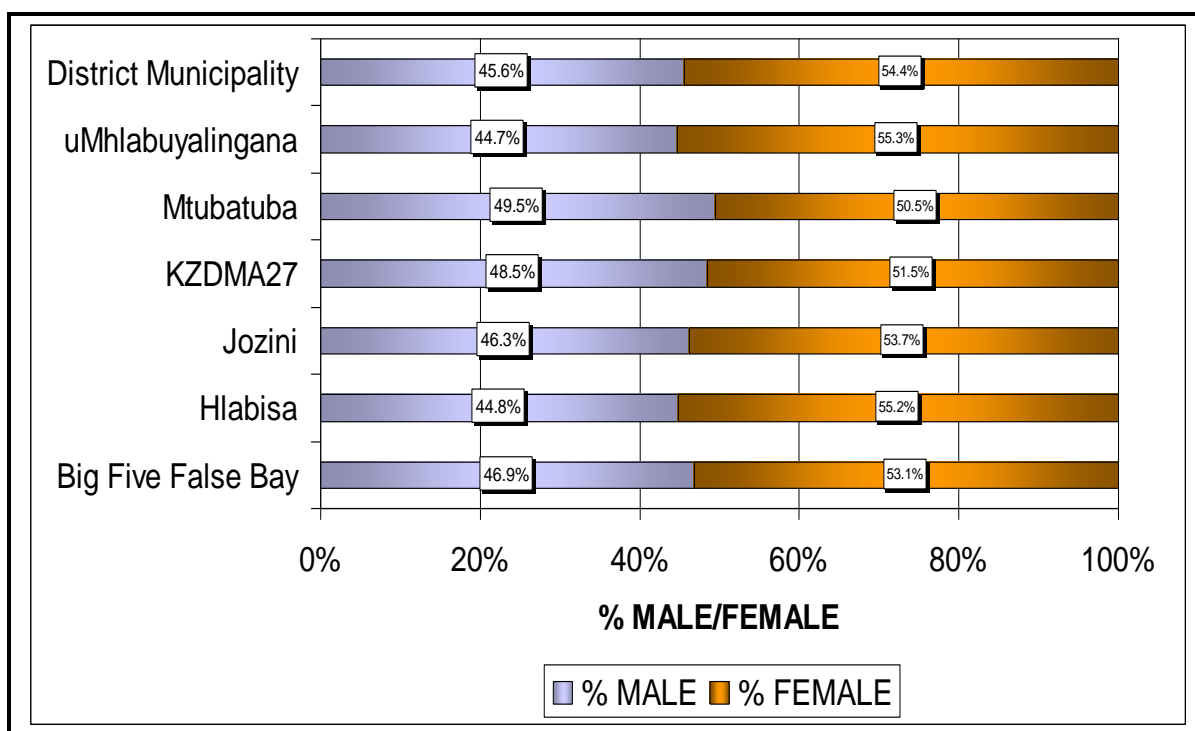
(3) The last census undertaken in this area that covered the entire District Municipality was the 2001 National Survey. Although community surveys were undertaken in 2007, this did not include the entire District Municipality.

(4) Historically, there has been a gender bias in migration, which resulted in more women remaining in the rural areas. This is changing with greater access to social security measures and improved service delivery in the towns and urban areas than in the rural areas. In addition this migration is no longer circular and is now being replaced by permanent migration (Umkhanyakude, 2009).

3.4.3 Gender

The gender profile of Umkhanyakude District Municipality (Figure 3.5) is uneven as the population is made up of 54.4% females and 45.6% males. Similarly, at the local level, within the Big Five False Bay and Jozini Municipalities, the population is made up of approximately 53% females and 47% males. This may also be attributed to urban migration to other areas, suggesting a lack of employment opportunities within the District.

Figure 3.5 Gender Profile per Municipal Area (n = 573,371)

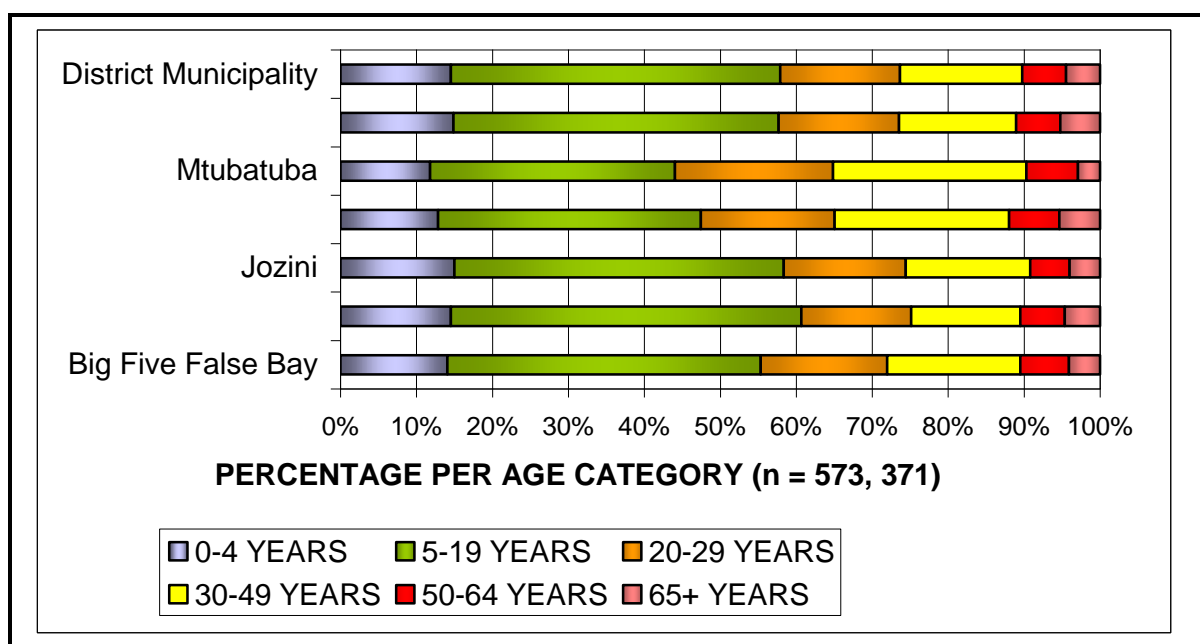


Source: Statistics SA, 2001

3.4.4 Age

As is depicted in Figure 3.6, the population of the District is exceptionally young, with 57% falling in the 0 to 19 years age category. Added to this, 4.29% of the population is over 65 years of age. Only 38.71% of the population is thus of working age. This indicates a high percentage of the population that is dependent and vulnerable to shocks.

Figure 3.6 Age Structure per Municipal Area

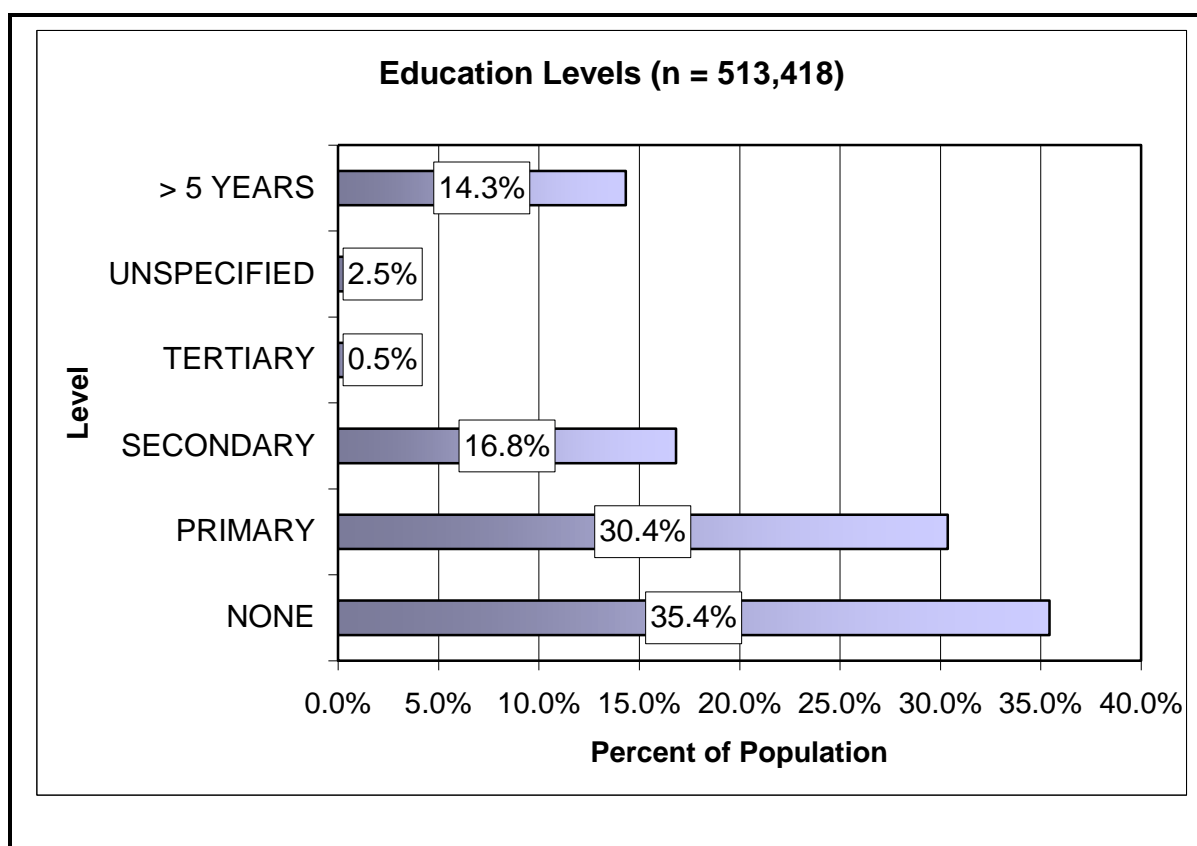


Source: Statistics SA, 2001

3.4.5 Education Levels

Excluding that portion of the population in the 0 to 5 years age category, it is evident that more than 65% of the population have no education or have only a primary level of education (Figure 3.7). Only 0.5% of the population of Umkhanyakude District has a tertiary education. Thus, education levels in the region are considered extremely low.

Figure 3.7 Education Levels for Umkhanyakude District Municipality

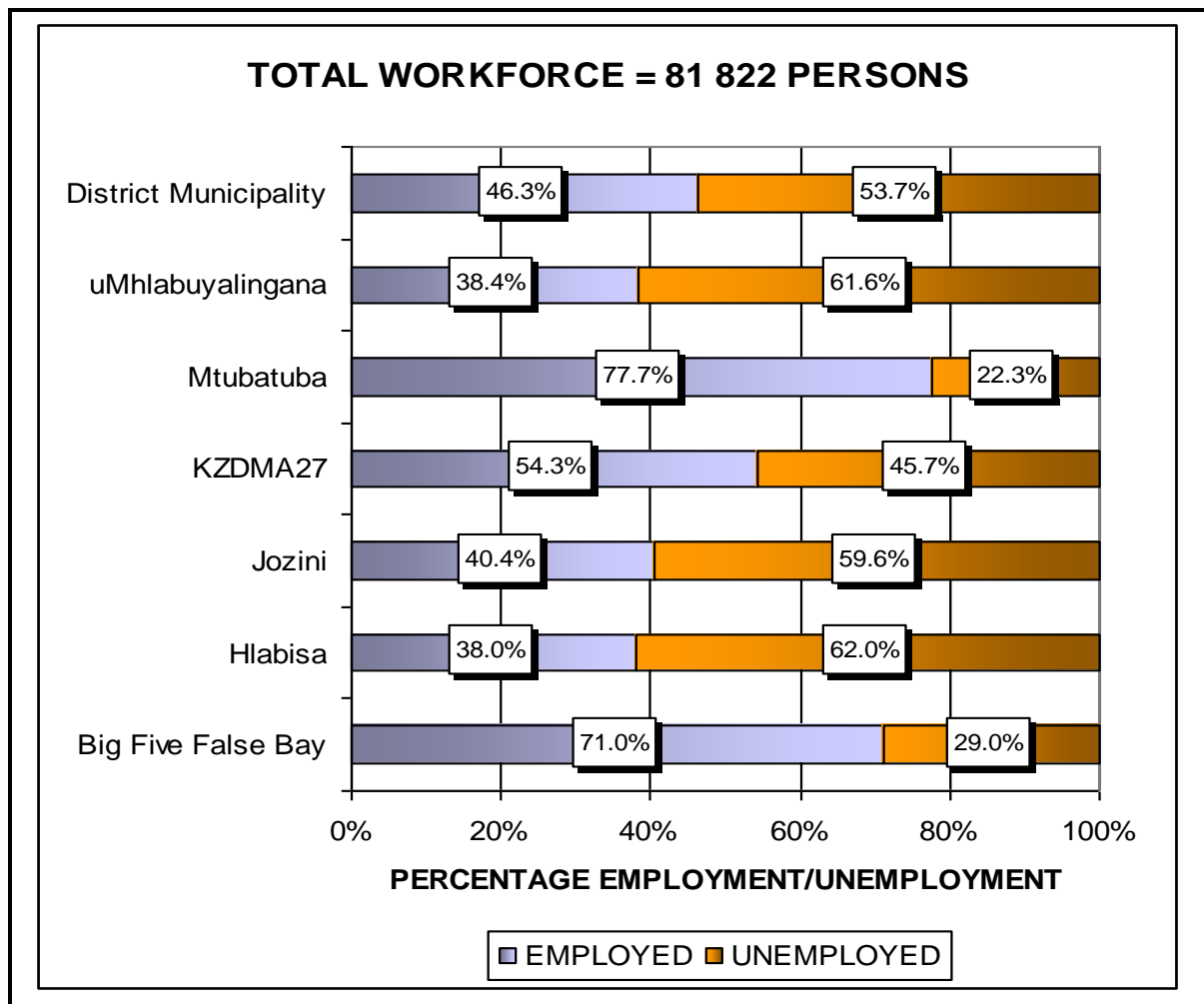


Source: Statistics SA, 2001

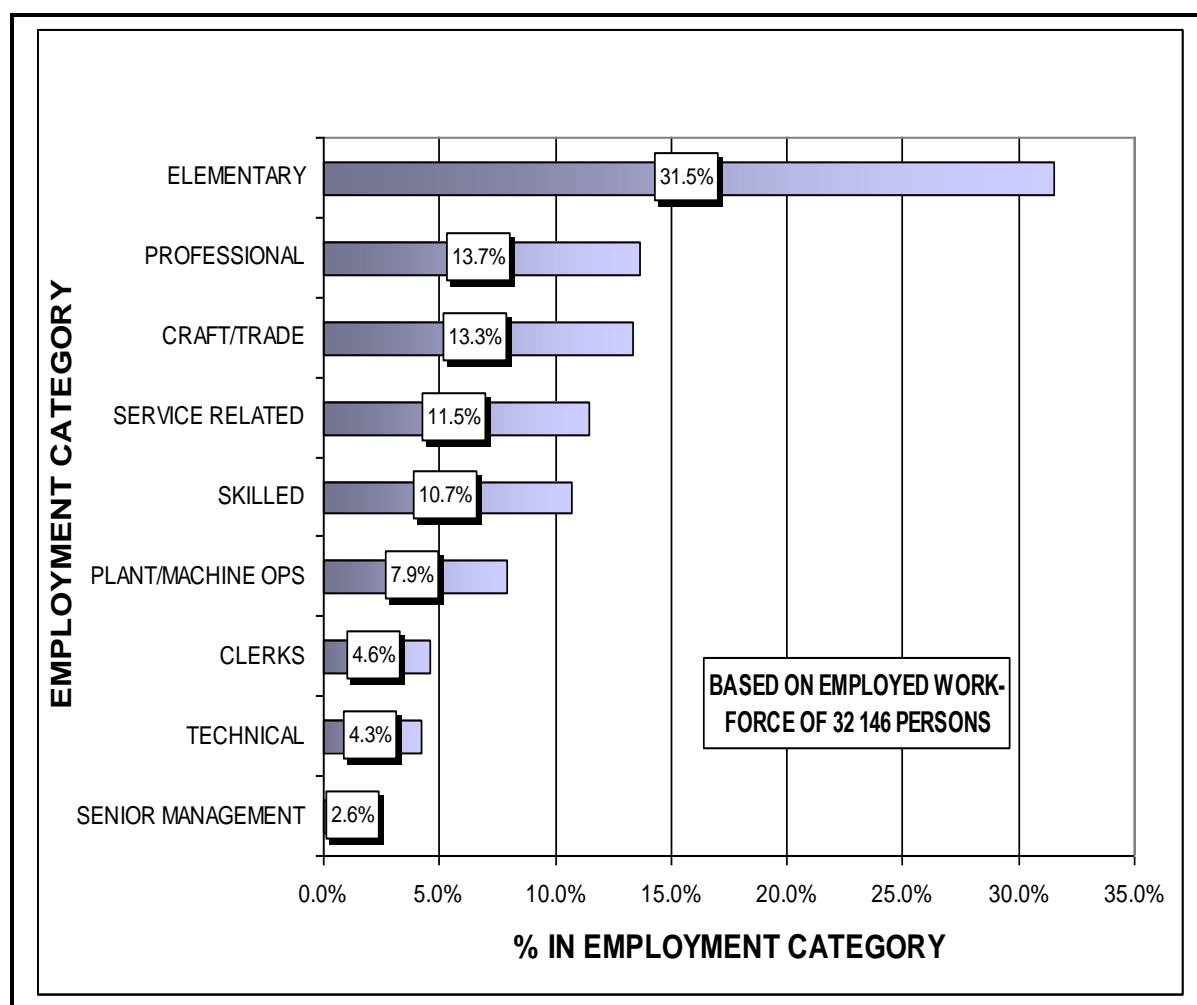
3.4.6 Employment Profile

As seen in Figure 3.8, 46.3% of Umkhanyakude District Municipality is employed. The high unemployment rate suggests a high dependency rate (that means more than 10 persons are dependent on the income of 1 employed person). The levels of unemployment are highest in Hlabisa (62%), Jozini (59.6%) and uMhlabuyalingana (61.6%) and lowest in Mtubatuba (22.3%) and Big Five False Bay (71.0%). Figure 3.9 indicates that the employed workforce in the region is predominantly engaged in elementary employment (31.5%). This includes manual/unskilled labour. A large percentage of the employed population is located in the professional (13.7%), craft/trade (13.3%), service-related (11.5%) and skilled (10.7%) categories. This may be due, particularly in the Big Five False Bay and Jozini areas, to the conservation and tourism sectors in the region.

Figure 3.8 Employment Index



Source: Statistics SA, 2001

Figure 3.9 Employment Category

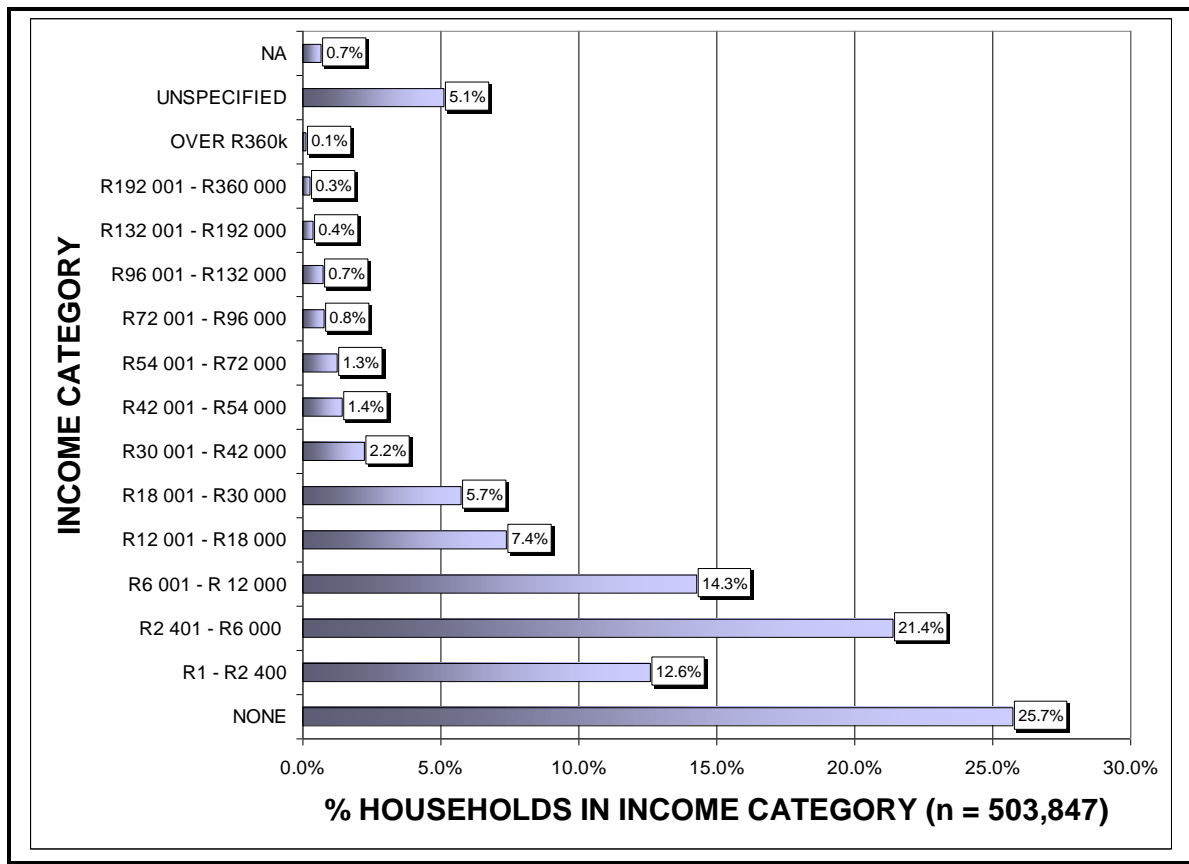
Source: Statistics SA, 2001

3.4.7 Income Distribution

High percentages (25.7%) of households in the District, as indicated in Figure 3.10, have no formal income. This suggests a high dependency on subsistence activities to sustain livelihoods. According to the Umkhanyakude Municipality (2004), more than 50% of households in the District have an income of below R500 per month. A key contributor to the low income levels is the high rate of unemployment and the low wages paid in specifically the agricultural sector (Umkhanyakude District Municipality, 2004).

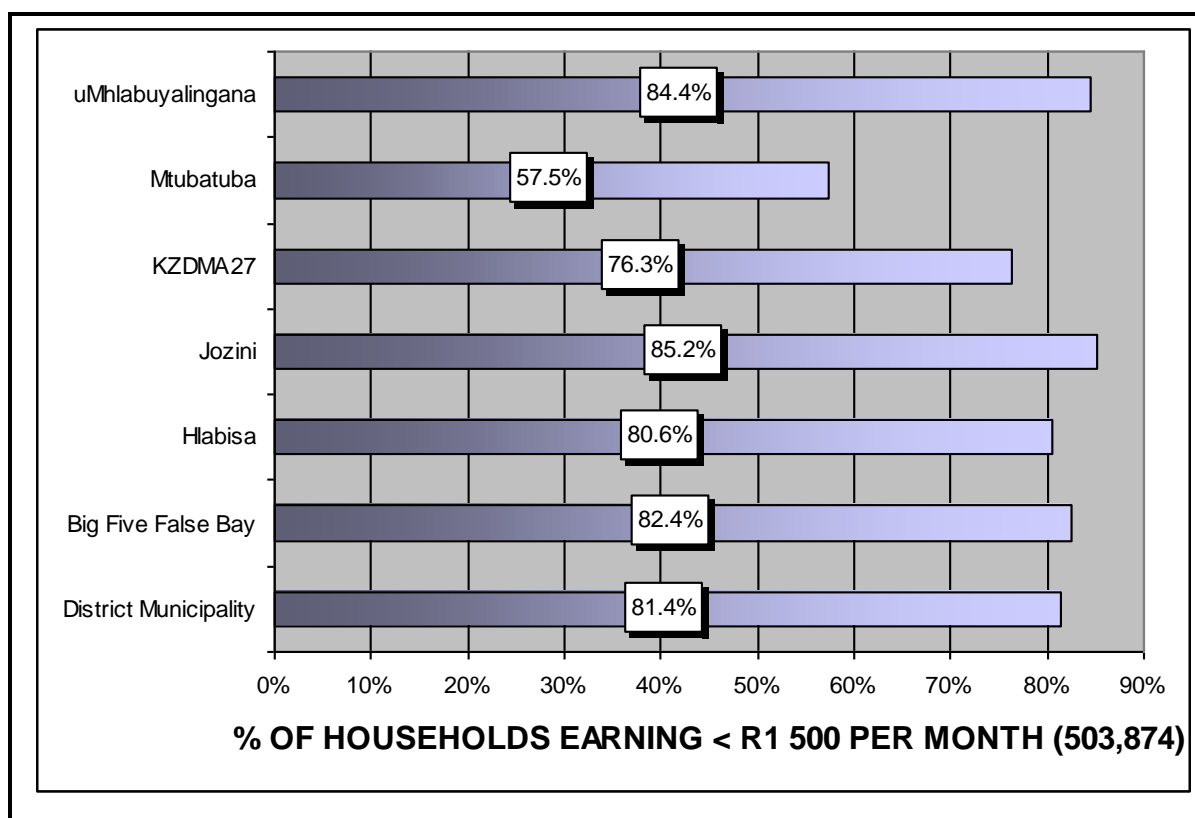
A total of 82.4% of households in the Big Five False Bay Municipality earn below R18,000 per annum (R1,500 per month). Given that on average a household is made up of 10-12 individuals, this income is extremely low.

Figure 3.10 Annual Household Income



Source: Statistics SA, 2001

Figure 3.11 Percentage Household Income below R1, 500 per Month



Source: Statistics SA, 2001

3.4.8 Service Delivery

The Umkhanyakude District Municipal area is characterised by low population densities (between 100 and 500 people per km²) and much of the area has a scattered settlement pattern. This makes service delivery to these areas difficult and often economically unviable (Umkhanyakude Municipality, 2009).

Electricity

The majority of households within the Umkhanyakude Municipal area remain without access to electricity (70.5% of all households), and are thus forced to use candles (53% of all households) for lighting and wood (46.9% of all households) or paraffin (6.9% of all households) for cooking/ heating (Statistics SA, 2001).

Water and Sanitation

The total number of households without potable water in the District is estimated to be around 54% (Statistics SA, 2001). Thus the majority of households within the District receive water from rivers, streams or boreholes. Water from these sources is shared with animals, which often exposes communities to diseases such as cholera. During drought seasons most of these streams dry up and leave people with limited sources of water. This is particularly apparent in the remote rural areas. The District Municipality has managed to provide sanitation in many households, however, a total of 57,654 households (approximately 10%) do not have access to any form of sanitation (Umkhanyakude District Municipality, 2004), this is particularly apparent in the study area.

Health Services

Umkhanyakude is made up of five health wards. Each health ward has one hospital which has a number of clinics and mobile stopping points, as seen in Table 3.1. According to Umkhanyakude District Municipality (2009), 92% of households within the municipal area have access (are within a 10km radius) to a health facility, be it a hospital, clinic or stopping point. It should be noted that the clinics and stopping points are, however, generally ill-equipped and only administer basic health services.

Table 3.1 Municipal Hospitals, Clinics and Stopping Points within Umkhanyakude District Municipality

Hospital	Number of Clinics	Number of Mobile Stopping Points
Bethesda Hospital	8	25
Hlabisa Hospital	15	35
Manguzi Hospital	9	30
Mosvold Hospital	10	34
Mseleni Hospital	8	18
Total	50	142

Source: Umkhanyakude District Municipality, 2009

3.5 HISTORICAL BACKGROUND TO THE STUDY AREA

The history of Zululand is a complex one, not only due to the tussle between different groups for land and power but one of conflict between nature and society to exist in this unsympathetic landscape. This section sets out to briefly explore the history of the study area, highlighting the history of settlement and conflict between various nations and later between various groups and the natural environment.

3.5.1 Conflict, Settlement and Land Use

Conflict Over Land and Power

From the landing of Vasco Da Gama on Christmas Day 1497, the settlement of the British in the 1800s, The Great Trek, The Anglo-Boer War and the various Zulu wars, indentured labour from India and eventually the apartheid state, settlement in KwaZulu-Natal has a complex and multifaceted history. It is these histories of conflict over land and power that have shaped the various settlement patterns and land uses in the study area and essentially the way in which we see the landscape today.

Prior to the major influx of Europeans in the early 19th century, Maputaland was a remote area inhabited predominantly by the AmaThonga tribe, who occupied much of northern Zululand and practised subsistence agriculture, fishing, hunting and the tending of livestock (Buchanan, 1999). To the south of St Lucia were approximately 50 independent Nguni clans, all speaking the same language and observing the same customs (Buchanan, 1999). One of these clans, originally led by Dingiswayo and later the famous King Shaka, became the well-known Zulu Nation. Under King Shaka, the Zulu nation comprised of a well-trained army that took control of the Zululand region. There has been a great deal written about the Zulu Nation, the exploits of King Shaka and the various Zulu wars against the Voortrekkers and the British (Leslie, 1975; Guy, 1979; Guy, 1982; Ballard, 1988; Hamilton 1998).

Although all the wars played a significant part in the history of Natal and the Zululand Region, of particular significance was the wars the British fought against the Zulu. During the period 1840-1880, the Natal Colony under British control was quite separate from the Zulu Kingdom. However, the British viewed the Zulu Kingdom as the greatest threat to

civilisation on the east coast of South Africa and in 1878, the British High Commissioner, Sir Bartle Frere and the commander in chief Lord Chelmsford, gave King Cetshwayo kaMpande (the nephew of the late King Shaka) an ultimatum to disband his army. Cetshwayo during this time had an army of 30,000 strong, under the leadership of Chief Ntshingwayo kaMahole (Buchanan, 1999). If he had disbanded his army, he would have been killed by relatives, thus ignored the British ultimatum (Buchanan, 1999).

As soon as the ultimatum expired in January 1879, Chelmsford led the British troops into Zulu territory. Chelmsford, however, underestimated the Zulus and the British army was attacked and defeated by the Zulu *impi* at the foot of Isandlwana. Later the same day, Prince Dabulamanzi (half brother of Cetshwayo) attacked Chelmsford's base camp at Rorke's Drift, where the Zulus were fought off by 139 British men (Ratray, 1999, cited in Buchanan, 1999). After further engagements at Hlobane, Kambula and Ulundi, due to the fact that the British had superior fire power, the Zulus were finally defeated. Cetshwayo was banished and the British set about destroying the power of the Zulu Kings (Ratray, 1999, cited in Buchanan, 1999).

Zululand was eventually annexed by the British in 1887 and ten years later incorporated into the colony of Natal. By 1902, soon after the Anglo Boer War, a commission was appointed to carve up Zululand. The colonial state split Zululand into a number of separate areas (Lambert, 1995). Certain areas were allocated for native reserves, in an attempt to provide a cheap means of governing the African population through indirect rule whilst at the same time exploiting the homestead economy (Lambert, 1995). Just under half of the region was reserved for white settlement and special areas were even set aside for game reserves (these included Hluhluwe, Umfolozi and St Lucia – Mkuze was proclaimed 10 years later) (Brooks, 1997). "Of the balance of about 12.5 million acres, the Zulu people were left with two million, the AmaThonga of Maputuland received even less consideration" (Buchanan, 1999: 46). Almost the entire floodplain between the Pongola and Mkuze Rivers – the only fertile land in the region – was designated crown land. The local communities, both Zulu and AmaThonga were pushed into the Ubombo Mountains and the infertile coastal area of the Muzi Swamps (Buchanan, 1999).

White Settlement and Agriculture in Zululand

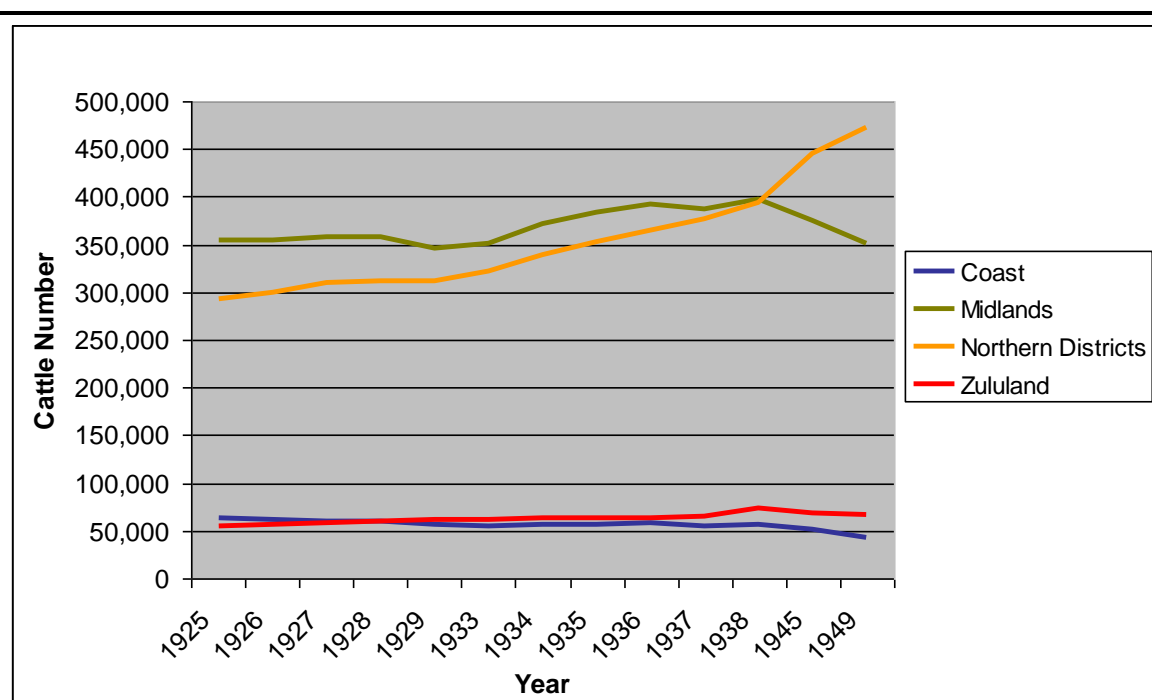
Although a large area was reserved for white settlement, white movement into the area was slow and the process only really gained a new sense of urgency in 1919, when young men returning from the battlefields of Europe swelled the ranks of the landless (Brooks, 1997). State intervention aided these settlers to acquire land in the Zululand region through advances, which numerous settlers took, however, would eventually not be able to repay. The common form of settlement was under leasehold for five years with the option to purchase the land. Government settlements were established at Mfolozi, Mkuze, Ntambanana, Magudu and Nkwaleni (Lincoln, 1995).

From the outset, the establishment of these settlements was hinged around the possibilities for plantation production. Along Zululand's Coast and northern interior, the principle agricultural commodities that came into production included sugar cane, forestry products and cotton (Lincoln, 1995). Cane growing was undertaken on much of Zululand's coast south of the Mfolozi River and cotton production was undertaken further north into the interior.

The region around the study area of this dissertation, particularly the Mkuze settlement, included predominantly cotton production, however, later included considerable amounts of livestock (Hurwitz, 1957). This was due to the fact that field crop production was largely dependent on an adequate supply of low wage seasonal labour and water. At the time, Zululand had a very limited pool of labour to draw from as conditions were far more favourable on the mines in Johannesburg than they were on plantations. As Lincoln (1995: 55) states: "An official concession was made in the mid-1920s allowing cotton growers to even employ young children". Coupled with the shortage of labour and the drier conditions in the northern interior, livestock farming became more popular.

Initially, livestock farming was predominantly undertaken in the Natal Midlands but when more intensive systems of land use appeared, wool and beef production were transferred to the relatively less developed areas of the northern districts and Zululand (Hurwitz, 1957). The distribution of white owned cattle across Natal from the period 1925 to 1949 may be seen in Figure 3.12.

Figure 3.12 Regional Distribution of Cattle in Natal and Zululand (1925 – 1949)



Note: This figure only includes commercial cattle on white owned farms and does not include “native” cattle stocks, either on white owned farms or in tribal reserves.

Source: Adapted from tabulated data in Hurwitz, 1957

The cattle in Zululand were utilised predominantly for beef and to a lesser extent butterfat. The beef produced in Zululand was utilised by the local market (Durban) and the production of butterfat for local and export markets (Hurwitz, 1957) “The production of butterfat was encouraged by the establishment of creameries and the stimulus given by the government in an attempt to place the South African dairy industry on an export basis” (Hurwitz, 1957: 17). However, this was mainly in the Midlands, Northern Districts and to a less significant degree, in Zululand.

Zulu Agriculture and Cattle Farming

Although it appears that commercial farming was only introduced to the area following white occupation, agriculture and cattle keeping was practised long before this by the AmaThonga and Zulu people. According to MacKinnon (1999: 99), “the two pillars of the pre-colonial Zululand economy were agriculture and cattle-keeping”. The value of cattle in the Zulu culture is both one of productive (in terms of the herds for milk and meat) and more importantly one of storable value (in terms of *lobola* - bridal exchange and *sisa* - the loaning of cattle) (MacKinnon, 1999).

Despite the British delimitations and expropriations, the loss of arable land that resulted and the overcrowded reserves, Zulu agriculture and cattle keeping persisted. The male Zulu domain of cattle keeping, however, managed to survive far better than the predominantly female domain of agriculture, as MacKinnon (1999: 99) points out:

Although reserve agriculture remained an integral part of African subsistence, the cattle economy was better able to withstand the onslaught of white commercial farming demands and adapt to the wider capitalist economy.

This was particularly due to the fact that during the 1920s and 1930s both male and female labour migration (particularly to the mines) caused less labour to be available for homestead food production through agricultural crops. Thus more emphasis was placed on increasing herds, which were both valuable as a food source and wealth. In addition, with the settlements of whites in the area, this allowed an outlet for the sale of Zulu cattle. Between 1921 and 1948, the number of African owned cattle in the Ubombo region grew from 12,400 to 22,800 head (Agricultural and Pastoral Census of the Union, cited in MacKinnon, 1999: 105). Despite various bans on the trading of white owned and native cattle, this was never the less the case and played a large part in the cattle industry in Zululand (Lincoln, 1995).

Although certain agricultural and livestock operations were relatively successful, it is particularly apparent that despite government support, the feasibility of the settlements in Zululand was held under constant threat by social and economic pressures and the various elements of the natural environment. The imperatives of settlement were such that the rhetoric of „progress“ tended to gloss over problems such as inadequate rainfall, the presence of endemic disease, or the sheer difficulty of transporting goods out of an isolated region (Brooks, 1997). In addition, the government and inexperienced settlers did not take account of crop and market failures, employment conditions, malaria, and most of all *Nagana*.

The History of Nagana in the Zululand Region

The tsetse fly and the disease that it spreads – *Trypanosomosis* or commonly known as *Nagana*, have played a major role in the history of Zululand. *Nagana* is a wasting disease in domestic stock caused by a blood parasite spread by the fly. There are 19 species of the

fly, three of which were to be found in Zululand. One species in particular, *Glossina pallidipes* almost resulted in the abolition of all of the major game reserves in Zululand, such as Mkuze, Umfolozi and Hluhluwe.

This hardy insect could exist in thinly scattered communities, feeding on small game such as warthog, bushpig and bushbuck and was considered to be the most difficult of all the species of tsetse flies to eradicate. Following the annexation of Zululand to Britain, it was brought to the attention of Sir Charles Saunders, later Chief Magistrate and Civil Commissioner for Zululand, that the local population were dependant on game for food and that very little game existed, except in the uninhabited localities. As a consequence of this, strict laws for the preservation of game were passed. This had a counter-productive effect. Unknown to the colonists, the subsequent increase in the numbers of large game animals in the Colony caused a corresponding increase in the occurrence of tsetse flies, which spread *Nagana* amongst domestic cattle. Surgeon-Major Sir David Bruce, was invited in 1884, by the Governor of Natal and Zululand, Sir Hely-Hutchinson to investigate the causes of *Nagana*, which was resulting in large-scale mortality of cattle in the region. Bruce reported that the whole of the Ubombo and Ingwavuma Districts were tsetse "fly belt" areas and thus it would be difficult to keep domestic stock in this region.

The opening up of approximately a third of Zululand for white settlement in early 1900s (as discussed above) aggravated the situation. Many of the new settlements were close to the game reserves that were in existence at the time and they were thus exposed to *Nagana*. The problems associated with *Nagana* continued to plague the inhabitants of Zululand for more than a decade, before the central government appointed R.H. Harris in 1921 to carry out further investigations into the tsetse fly problem (Gush, 2000). Harris's investigations had led him to a realisation that the tsetse fly hunted by sight rather than smell and this, in turn, led to the invention of the Harris Fly Trap in the late twenties. By 1938, 25,000 Harris traps were in use in Zululand (Gush, 2000). These traps were extensively used in Mkuze Game Reserve which was under threat of being de-proclaimed due to the occurrence of tsetse fly and the impacts to the surrounding cattle farms.

In October 1939 it was agreed that control of Mkuze would formally be passed to the Veterinary Department and numerous campaigns were run within Mkuze in an attempt to try and eradicate *Nagana*. The Veterinary Division's initial campaign was based on the

belief that *Nagana* could be eradicated through the extensive use of the Harris Fly Trap and by clearing areas of bush to create effective barriers, thereby destroying likely breeding places of the fly. By clearing the bush the flytraps would also become more visible to the flies.

A second major campaign against the disease was undertaken from March 1943 to February 1950. The objective of this campaign involved the wholesale destruction of game. The thinking behind this strategy was that, if sufficient animals were destroyed, the fly would be deprived of its host and *Nagana* would disappear (Gush, 2000). The method employed in the campaign was to systematically destroy the game from the periphery of the reserve, moving systematically towards the centre. This was to avoid scattering the game and spreading the flies over a wider area. Evidence of this was found in the minutes of a meeting held by the Bayala Farmers Association on Wednesday 27 August, 1947, where it was recorded that:

Dr Kluge reported that he had been assured by the veterinary department, which is now in control of Mkuze game reserve, that 600 head of game were being shot in Mkuze each month. The tails are being kept and dated for record.

In 1945 it was decided that, in addition to the shooting campaign, the use of insecticides such as *Dichloro Diphenyl Trichloroethane* (DDT) to control the fly should be investigated. Laboratory tests had proved that DDT was effective against tsetse and other species of flies and it was decided to experiment with the trial spraying of a designated area from the air (Gush, 2000). Mkuze was chosen for the first experimental spraying as the terrain was flatter and therefore less dangerous for the pilots, who had to fly low over the control area in tight formation. This trial spraying at Mkuze was the first attempt made to eradicate the tsetse fly by means of DDT sprayed from the air. The initial results were encouraging and eventually led to the Veterinary Department's successful efforts to control the disease (Gush, 2000). Although the disease was eventually controlled through the use of DDT, the number of game species that were shot were in the tens of thousands (Gush, 2000). In addition, the tsetse flies were not the only insects killed by the aerial spraying and numerous other insect and bird species were killed off. The presence of *Nagana* in Zululand meant that preserving game for tourists was at odds with the interests of white settler farmers.

History of State Game Reserves in Zululand

With the British occupation of Zululand in 1879, government officials, military personnel, and hunters were quick to follow the earlier hunter-traders in the destruction of game in the region (Buchanan, 1999). “In the years following the annexation of Zululand to the crown in 1887, Sir Melmoth Osborn, Resident Commissioner in Zululand, pressed for greater protection to be given to game and, in particular, to large species such as elephant and rhino. He was to report to the new governor Sir Charles Mitchell that „very few head of large game remain in Zululand” (Gush, 2000: 8). It was his report and interest in conservation that led to the promulgation of Zululand's first game law in the form of Zululand Proclamation No 11 of 31 March 1890. Essentially, the proclamation grouped all the larger mammals to be found in Zululand under Schedule D and the governor's permission was required before anything on the schedule could be destroyed.

By 1894 a groundswell of support for the establishment of game reserves in Zululand emerged. President Paul Kruger had already proclaimed the first game reserve in the Pongola area (Caruthers, 1994), with Hluhluwe and Umfolozi - declared in 1895 – soon to follow. Following the Union, a select committee appointed by the provincial council of Natal to oversee the use of the game laws across the region, recommended that a game conservator be appointed to live in Zululand. Frederick Vaughan-Kirby, was appointed to the post in August 1911 and became the first professional game conservation officer in Zululand (Gush, 2000). Soon after this appointment, Mkuze Game reserve was proclaimed in 1912.

Although Zululand was endowed with valuable big game and natural beauty (particularly in its three major reserves – Hluhluwe, Umfolozi and Mkuze), it also had settler farmers engaged in commercial agriculture and it had the tsetse fly. For this reason these reserves were constantly in an insecure position and numerous threats were made to abolish these game reserves. In order to protect these reserves, or even one of them, many conservationists fought for Zululand's game reserves to be proclaimed under the National Parks Act (Brooks, 2004).

There was a huge drive on the part of a variety of conservationists, politicians, activists and the media to punt the idea of Zululand and its wildlife as of national importance, in

particular the white Rhinoceros. However, as Brooks (2004:107) highlights, there were two particularly problematic factors that were against the reserves in Zululand gaining the status as National Parks.

The first was the increasingly marginalised position of the Natal province and its largely English speaking voting population within the Union of South Africa, a factor which made it difficult to sell the idea of a Zululand park as part of a national heritage. The second factor was the presence of *Nagana* in Zululand, and the degree to which this was politically dangerous for national politicians to seem to be supporting a park that would apparently work against the interests of white settlers in the countryside.

Despite the failure of any of the Zululand game reserves being proclaimed national parks, the push for its conservation paved the way for a provincial conservation effort and change in administrative structures (Brooks, 2004). The Zululand Game Reserves and Parks Board was eventually established in 1939. This followed a report of an investigating committee that was submitted in 1937, when the formation of a statutory body, somewhat on the lines of the National Parks Board of Trustees, was recommended. This Provincial Board controlled the management of the Zululand game reserves for the next 50 years.

With an increase in the mobility of tourists during this time, coupled with the rise in the popularity of the Zululand game reserves as a retreat for local tourists, the late 1930s saw a large number of tourists visit the Zululand (state) game reserves (Gush, 2000). During this time there was a shift in the management of these natural spaces. The increasing tourism potential meant a more militarised approach with the erection of game fences and the recruitment of young white rangers (Brooks, 2005). The fences served both to keep the game in, control *Nagana*, keep neighbouring farmers happy and to keep the local communities out. The game reserves with their fences and patrolling game guards became an intimidating and problematic obstacle for local residents of the tribal areas surrounding them. As Brooks (2005: 234) highlights:

From the early 1940s it became increasingly difficult for local people to enter the reserve (Hluhluwe) and poaching offences were pursued more vigorously.....Once the anti-*Nagana* operations ended, tourists were unlikely to encounter in the game reserve any African other than game guards – who of course featured in the tourism discourse as an integral part of the space.

The Zululand reserves, although aimed predominantly at the local market, still presented these spaces as wild Africa, suspended in time. The need to protect these areas facilitated even further the construction and portrayal of these reserves as an untouched and pristine wilderness, suspended in time. This was despite the history of the Hluhluwe and Umfolozi Reserves and its corridor linking the two and the forced removals that took place through the 1940s (Brooks, 2005). The three major state reserves have had a complex history in both the battle to conserve the natural environment and in the social dynamics and relations with local inhabitants. They did however create an increased awareness and popularity of nature tourism in Zululand, something on which the emergence of PGRs, which started to emerge in the late 1980s, were built upon.

3.6 THE FIVE GAME RESERVES

The game reserves selected for this study are listed in Table 3.2 below and illustrated in Figure 3.13, overleaf. The information presented below was obtained from the various PGR websites and augmented from in depth manager interviews.

Table 3.2 Game Reserves Selected in this Study

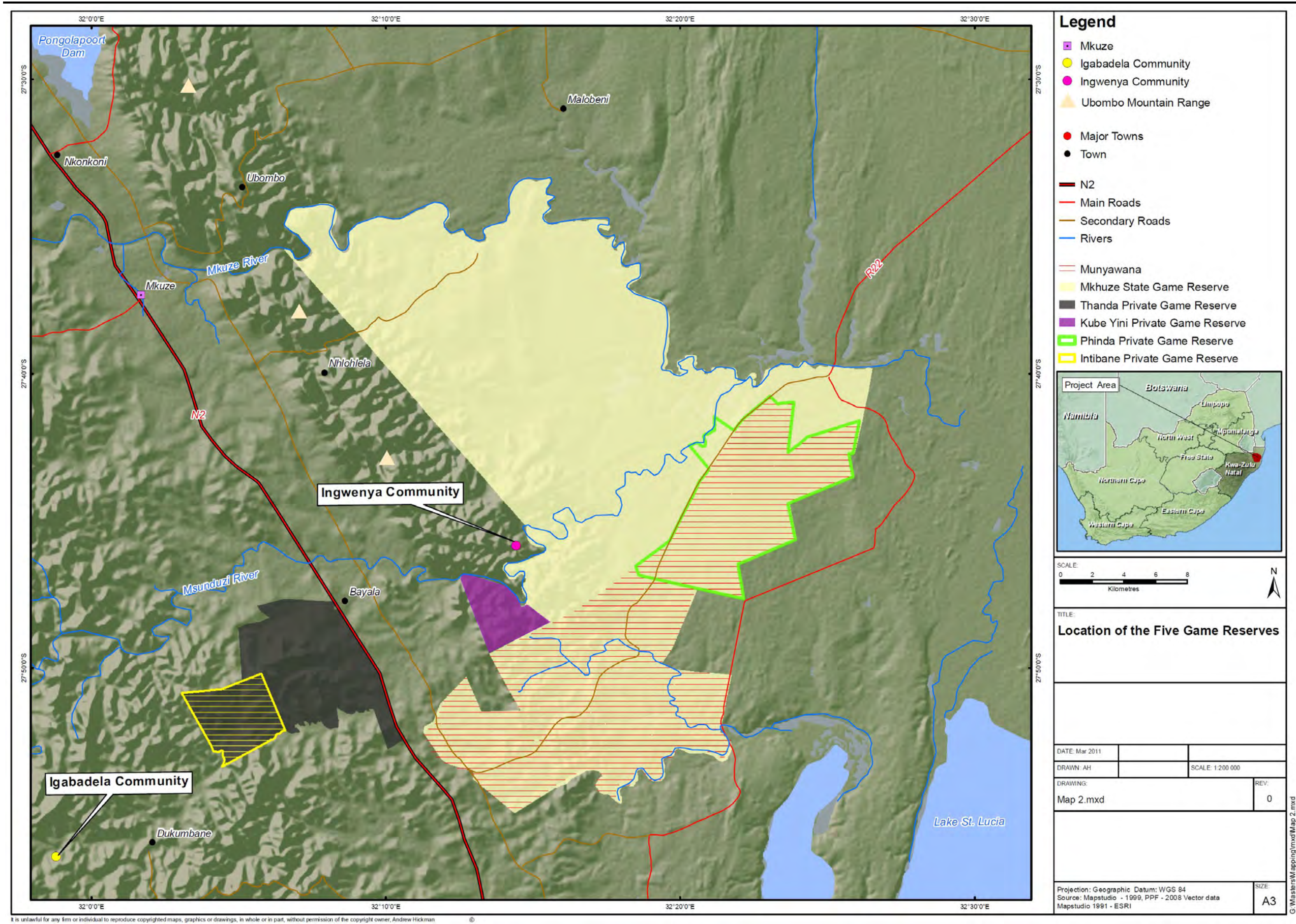
Game Reserve	Website
1. Thanda Private PGR	http://www.thanda.com/
2. Intibane PGR	http://www.thanda.com/
3. Kube-Yini PGR	http://www.kubeyini.net/
4. Phinda PGR ⁽¹⁾	http://www.phinda.com/
5. Mkuze Game Reserve (State owned)	http://www.kznwildlife.com/index.php?/Mkhuze-Game-Reserve-Overview.html

All five game reserves undertake wildlife based ecotourism as their primary means of business. Each reserve selected in this study is unique, with varying histories, ownership and management approaches, clientele and marketing positions. From game reserves that have dropped their fences, a private reserve owned by neighbouring communities, a share-block reserve, to a state reserve that has been in existence for over 98 years. These reserves range in size from 1,214ha to 40,000ha, with an average size of 15,642ha. Although all these reserves are different, they all (including parts of Mkuze) were

(1) Phinda Private Game Reserve is a part of the Munyawana which includes an amalgamation of farms which dropped their fences, these include: Phinda Game Reserve, Bumbeni, Little Zuka and Zuka (formerly Phumalanga).

previously under commercial agriculture. A brief summary of each reserve is provided below.

Figure 3.13 Location of the Five Game Reserves



3.6.1 Thanda and Intibane Private Game Reserves

Thanda PGR is located 23km north of Hluhluwe and 30km south of Mkuze and was established in 2002. Owned by wealthy Swedish businessman Dan Oloffson. A former cattle, cotton and sisal farm, Thanda PGR (which since 2007, includes Intibane PGR, a neighbouring game reserve which was bought out and incorporated into Thanda) has been transformed into an exclusive 14,000ha private reserve. Initially intended as a hunting farm, the decision was eventually made by the owner to establish a luxury lodge and run the reserve as an exclusive five star reserve. Thanda PGR, which is a big five reserve, also includes animals such as cheetah and wild dogs. The reserve caters almost exclusively for international clientele with five star facilities including a main lodge, tented camp, exclusive private villa and a wellness centre.

3.6.2 Phinda Private Game Reserve

Phinda Izilwane (which is derived from Ukhuphindela kwezilwane, meaning the return of the wildlife in isiZulu) was established in 1990 and was the first group of farms in the region to be converted from traditional agriculture to a PGR. Previously under cattle, game and pineapples, this collection of smaller farms were bought out and developed into what is today, &Beyond Phinda PGR. Covering a total area of 23,000ha, Phinda PGR borders Mkuze Game Reserve to the north and the Isimangoliso Wetland Park to the south and east. Phinda PGR is similar to Thanda PGR in that it is a big five reserve that also caters predominantly for the international market with six exclusive luxury lodges within the reserve.

Phinda PGR is rather unique in comparison to the other PGRs in this study in that it has undergone a successful land claim settlement. In 2007, Phinda and the Makhasa and Mngobokazi communities signed a land restitution deal which restored 9,500ha of the Reserve to these two communities to the east of Phinda. As landlords, these communities receive rental from the Phinda land, whilst Phinda continues running the business of Phinda PGR for the next 72 years, and the communities have in turn committed the land to wildlife in perpetuity.

3.6.3 Kube Yini

Kube Yini is a PGR (comprising of 1,214ha) bordering the community of Ingwenya and the game reserves of Mkuze, Phinda, Sungalwana and Bayala. Previously a cattle, cotton and maize farm, Kube Yini was acquired by Andrew Montgomery in 1989 (P. Binney, *pers comm*, 2008). Although the farm was previously under commercial agriculture, the topography of the farm was not particularly suited for crop production or cattle ranching. According to Binney (*pers comm*, 2008):

Despite some of the flatter areas being cleared and used successfully for the growing of crops, the rough terrain made gathering, counting and dipping cattle during various times of the year difficult. In addition, a reliable water source was not available to adequately irrigate the crops. An opportunity was realised to develop an ecotourism share block and thus was pursued.

The intention of Kube Yini was to develop a jointly owned reserve where the collective resources of shareholders could fund the operation and management of the reserve. Over a three year period, the reserve was rehabilitated, accommodation was constructed for prospective shareholders and infrastructure set in place to introduce game (P. Binney, *pers comm*, 2008). Kube Yini was then marketed to prospective shareholders as a type of share block game reserve, where 50 sites were made available for shareholders to purchase and build on (W. Botha, *pers comm*, 2008).

3.6.4 Mkuze Game Reserve

Mkuze Game Reserve is a state owned reserve, consisting of a total of 40,000ha. Mkuze adjoins the Isimangoliso Wetland Park to the east, which was recently proclaimed a world heritage site. The Mkuze River forms the northern and eastern boundaries of the reserve, with the Msunduzi River forming part of the southern boundary. Being a state owned reserve, Mkuze caters for both the local and international market, with a variety of accommodation, including a self-catering tented safari camp, cottages, chalets, rest huts and camping and caravanning facilities (P. Havemann, *pers comm*, 2007). In addition, Mkuze also has an educational camp with two dormitories.

Mkuze, unlike the other reserves in this study has a long and very different history, which spans the last 98 years. The history of Mkuze is a good indication of the perceptions of nature and how the perceptions and land use in the region has been managed and altered

over the last 50 years. Established in 1912, Mkuze was not converted from commercial agriculture to game, but rather has a long history as a major game reserve in KwaZulu-Natal. As discussed above, Mkuze was set aside from the start as a conservation area, although, nothing appears to have happened in the reserve for the first decade of its existence and it saw a rocky beginning with threats of de-proclamation due to *Nagana* and agricultural activities in the region (Gush, 2000).

During the early years of the reserve a number of game Conservators were mandated with looking after it. Journals and letters from the various conservators (Vaughan-Kirby, 1916; Potter, 1931, 1932, 1933, 1935, 1936, 1939, 1941) indicate that they experienced many of the same problems in the establishment of the reserve. These included poaching from locals in and around the reserve and the control of the influx of local inhabitants, their crops, and their cattle into the game reserve (Vaughan-Kirby, 1916). The reserve, however, had limited staff and the various game conservators did not reside in the reserve. Mkuze was eventually, in 1939, brought under the Zululand Game Reserves and Parks Board (known today as Ezemvelo KZN Wildlife), which controlled the management of Mkuze and the other Zululand game reserves.

For more than 50 years following its establishment as a game reserve, persistent calls were made to abolish Mkuze. The first calls for the abolishment of the Mkuze Game Reserve came in 1914, only two years after proclamation and determined efforts to achieve this objective continued right through to the late 1960s (Gush, 2000). Initially, the principal reason for the call to de-proclaim the reserve was the presence of the tsetse fly in the reserve, as discussed above. Later, efforts to abolish the reserve assumed political connotations, much of which was centred around the building of the Jozini Dam on the Pongola River and the associated attempts of the Nationalist government to establish agricultural enterprises on the Makatini Flats. The de-proclamation of Mkuze Game Reserve was also visited when it was proposed as a relocation settlement in exchange for the Corridor, that would link the Umfolozi and Hluhluwe Game Reserves.

In June 1956, the Regional Representative of the Department of Lands advised that land taken up by the Mkuze Game Reserve now formed a most important link in the extensive irrigation scheme contemplated for the new dam (Gush, 2000). Calls were again made to do away with the reserve. Engineers working on the design of the dam had calculated that

practically the whole of Mkuze could be irrigated from one of the main canals of this scheme (Gush, 2000). It was felt that the viability of the dam would be seriously prejudiced should the game reserve not become available for the central government's purposes.

At the time the Department of Water Affairs anticipated that approximately 4,800ha of Mkuze could be placed under irrigation from the Jozini Dam. However, as a result of indecisiveness regarding the future use of the dam, a slump in the price of sugar in the late 1960s and other problems associated with the use of the dam caused the authorities to rethink the whole question of using the Makatini Flats for agricultural purposes. “An estimated 500,000 refugees from war torn Mozambique poured into the region in the 1970s. The logistics of moving such a vast number of people to make way for white farmers became unmanageable” (Buchanan, 1999). The fortunate result of this delay was that the Board was never formally requested to surrender the game reserve for agricultural uses.

3.7 CONCLUSION

This chapter has provided essential background pertaining to both the biophysical as well as the socio-economic context of the study area. It has highlighted very briefly the agrarian history of the wider region, thus providing a context to which the more recent land use change, from conventional commercial agriculture to game reserves, has taken place. In addition, this Chapter has provided a brief overview of the very different game reserves located in the area and the histories behind their establishment. *Chapter Four* presents the method used to collect and analyse the data required to answer the aim and objectives of this study.

4 CHAPTER FOUR – RESEARCH METHODOLOGY

4.1 INTRODUCTION

As stated earlier, the aim of this research is to investigate how and to what extent privatised forms of nature production have impacted on the socio-economic position of ex-farm dwellers and the community of Ingwenya. In order to meet this aim, a multi-pronged approach to both collecting and analysing the data was adopted. Both qualitative and quantitative data were gathered in order to gain a holistic understanding of the process of agrarian change and how this has impacted on the livelihoods of ex-farm dwellers and members of the community of Ingwenya. This chapter outlines the methodologies that were used to gather and analyse the data required to answer the research questions. Furthermore, it substantiates the reasons as to why these methods were deemed appropriate and discusses some of the limitations encountered with these methods.

4.2 PILOT STUDY

In order to assess the viability of the proposed research aim and objectives and to gain a greater understanding of the study area, a pilot study was undertaken by visiting the proposed game reserves and surrounding communities. Initially, a week (from the 22nd to the 29th of July 2007) was spent staying with the wildlife manager of Thanda PGR, through whom a number of contacts were established. During the time spent on the initial pilot study and subsequent trips to the area, the researcher started to build a network of relationships in the area. Conducting social research within and surrounding PGRs is challenging in the sense that it relies on relationships and developing a means of gaining access to these areas and information surrounding them, as these are not „public“ spaces. Through my association with the wildlife manager at Thanda PGR and due to sharing a similar cultural and social background to many of the managers and staff of the surrounding PGRs, the researcher was accepted as an „insider“. “By virtue of their same social background, „insiders“ arguably have access to a far greater range of experiences and emotions than would be the case for „outsiders“” (Mather, 1996: 13).

During the initial pilot study, time was spent at Thanda PGR assisting the wildlife manager with the day to day management of the reserve. This involved assisting with

burning regimes, fence patrols, tracking of animals, culling, bush clearing and the management of staff. Through association with the wildlife manager at Thanda PGR, the researcher was introduced to managers and staff of the surrounding game reserves. These included Intibane, Phinda, Zuka, Bayete, Zululand Rhino Reserve, Kube Yini and the state game reserve Mkuze.

In addition to visiting the PGRs in the area, visits were also made to the communal/tribal land areas adjacent to the privately owned and state reserves. The area was driven by the researcher, assisted by maps and a global positioning system (GPS) to establish PGR boundaries and those of the communities in the area. The two communities identified as possible case studies were the communities of Ingwenya and Igabadela (as seen Figure 3.13).

4.2.1 The Community of Ingwenya

The community of Ingwenya is located within the Ubombo Mountains, east of the N2 national road and bordering the game reserves of Mkuze to the east and Kube Yini to the south. Roads into the area are basic and could not be accessed by the researcher's vehicle, thus, arrangements were made through the wildlife manager of Thanda and the Ubombo Development Trust (UDT) to visit this community in a 4 x 4. The UDT is an organisation funded by a philanthropist who aims to uplift this local community through the provision of technical expertise, as well as supplies, equipment and financial resources to support groups or individuals with community-based development projects. The UDT has an established presence in the area and through it access was gained to this community. Through already established relationships and trust, the UDT introduced the researcher to key members of the community.

During the pilot study, an informal meeting was held with the community Induna⁽⁶⁾ (Induna Mtshali), explaining the aim of the proposed research and requesting permission to conduct research within the community. Permission was granted and an agreement was made that the researcher would continue communicating the progress of the research with the Induna. Guided by the director of the UDT, the researcher was taken through the

(6) An Induna (singular) or Izinduna (plural) is a Zulu title given to an advisor, ambassador or headman who acts as a bridge or representative between the people and the local chief.

community. Time was spent discussing and establishing issues in the area and speaking informally to local residents. The informal conversational interview method was used as it has no formal structure but is guided by the context within which the interviews are done (Kitchen and Tate, 2000). Preliminary information was gathered pertaining to the initial research aim and objectives of the study. Information gathered was recorded in the form of notes and photographs.

4.2.2 The Community of Igabadela

The community of Igabadela is located to the west of the N2, bordering the PGRs of Thanda/Intibane, Bayete and Zululand Rhino Reserve. During the pilot study and subsequent visits, the communal area of Igabadela was explored by car and on foot with the assistance of a local community member as a translator. Preliminary information was gathered through informal interviews eliciting information pertaining to the initial research aim and objectives of the study.

Subsequent to the pilot study, a decision was made to choose the community of Ingwenya as the case study for this research. This was due to a number of variables, including accessibility through established relationships, location of the community in relation to bordering game reserves, history of the area, and the researcher's interest in the livelihood strategies of such a remote Zululand community. The fact that the researcher was introduced into the community of Ingwenya through the UDT, was a huge advantage in that this allowed me to gain access into the community and its members, which would have otherwise taken many months or even years to achieve.

4.3 QUANTITATIVE DATA SOURCES

There is sufficient evidence that social and community dynamics are best examined by the use of a multipronged approach, which includes both quantitative and qualitative data sources. This section provides further detail on these sources and the justification as to why these were deemed most appropriate.

4.3.1 Primary Quantitative Data Collection

Household Livelihoods Questionnaire Surveys

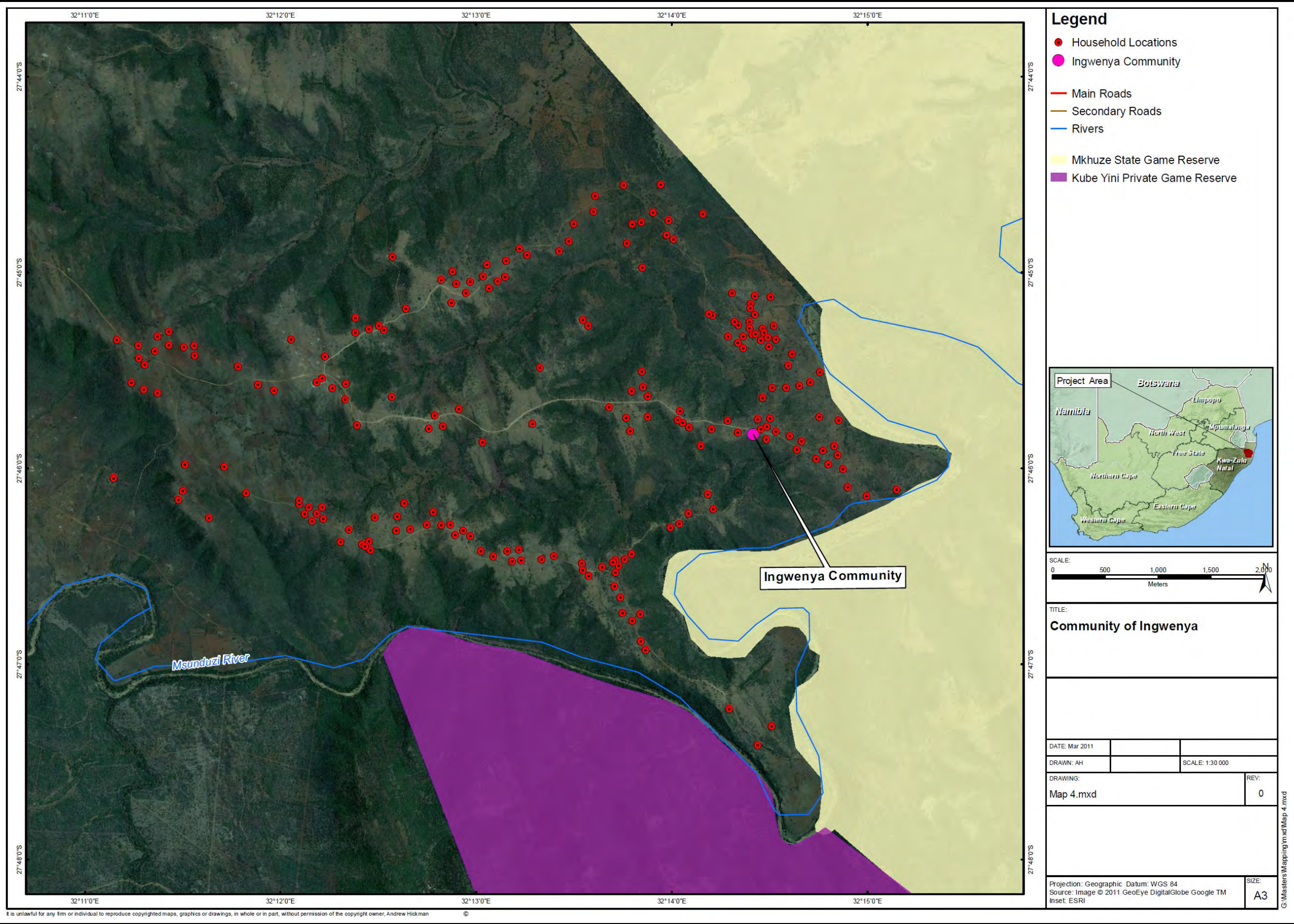
In order to establish the baseline demographics and livelihood strategies of each homestead of the community of Ingwenya, a questionnaire survey was conducted across the community (a copy of the questionnaire survey may be found in *Appendix A*). The household questionnaire survey consisted of open-ended, close-ended and pre-coded questions and was structured around establishing livelihoods assets and strategies, as discussed in *Chapter Two*. Rural households in many developing countries survive by engaging in a diverse set of activities and interdependencies amongst their kin group or community. Some of these activities may involve an exchange process in which services are performed or goods produced which may be exchanged for cash or for recipient goods and services (May, 1996). These may range from farming, to trading in local goods and often even migration to distant cities. In order to understand these complex interrelations, various methods of assessing rural livelihoods have been adopted by researchers and development agencies concerned with poverty reduction, sustainability and livelihood strategies. “Most approaches have in common that they regard the asset status of poor individuals or households as fundamental to understanding options open to them, the strategies they adopt for survival and their vulnerability to adverse trends and events” (Ellis, 2000: 127).

Although there are a number of possible ways of measuring rural livelihoods, this research utilised the SLA. The SLA is a conceptual tool derived from theoretical and conceptual concerns related to livelihoods, developed by the Department for International Development (DFID) as a guide for collecting, analysing and interpreting data collected on rural livelihoods. The SLA was discussed in detail in *Chapter Two*.

The Sample Population

The sample population was the community of Ingwenya (as seen in Figure 4.1). This community is situated adjacent to Mkuze Game Reserve, Kube Yini PGR and the N2 Freeway. This community consists of approximately 1,392 people and falls across two Izinduna areas (namely Induna Mtshali and Induna Nkosi). This community is a part of the wider Local Municipal area of Jozini which consists of a total population of approximately 151, 683 people (Umkhanyakude District Municipality, 2004).

Figure 4.1 Map of the Community of Ingwenya



The Sampling Frame

The population within the sampling frame was accessed through the use of a map and a ground truthing survey. It was established in the pilot survey that the area was broken up into tribal areas administered by the Izinduna. It was thus decided that two Izinduna areas would be sampled. This was the initial means chosen as rural communities generally do not have telephone directories or formal addresses. Rural populations generally follow a scattered settlement pattern and thus the sample frame was chosen to coincide with all households within the UDT area of work.

The Sampling Unit

The chosen unit of study was the homestead, which refers to a traditional Zulu Umuzi (*singular*) or Imizi (*plural*), a family-based village or “household” which typically consists of two to three sleeping structures, outside cooking area and a store room. The homestead may be made up of an extended family.

The Size of the Sample

The sample consisted of saturation sample of a total of 161 homesteads (1,378 people of the total population of 1,392). As seen in Figure 4.1, this encompasses the entire community of Ingwenya.

Sampling Strategy

The data collection was in the form of a questionnaire survey that was conducted on foot and consisted of a face-to-face meeting with a family representative at each homestead, across the sampling frame. Two local isiZulu translators were utilised for the questionnaire survey as they have an understanding of the area, cultural etiquette and can speak the language. These translators understood the objectives of the survey and signed a confidentiality agreement before commencing. The research aim and objectives were explained to each respondent and they were informed that their anonymity and confidentiality would be ensured at all times.

The survey was undertaken over a three month period, where each homestead was visited. During the survey, a GPS co-ordinate of each homestead was taken as a reference. This assisted in the plotting of all homesteads on an orthophotographic map and ensured all homesteads within the sample frame were accounted for. If the respondent was not at home when the survey was to be conducted, the next homestead was sampled. A note was then made (along with the GPS co-ordinates) of all homesteads unavailable. These households

were visited again twice, if there was still no response, these homesteads were considered as „no“ responses. This however only included 6 households within the entire community.

Game Reserve Managers, Questionnaire Surveys

Questionnaire surveys were given to the managers at the five game reserves selected as part of the case study. A copy of this questionnaire may be found in *Appendix B*. The aim of this survey was to:

- Establish the driving forces behind the growing trend to convert traditional agricultural farms to wildlife-based forms of land-use across the Zululand region.
- Investigate the establishment of the PGRs, their current tourism activities, socio-economic trends within the industry and environmental/conservation issues that have been encountered.
- Ascertain the current relationships between PGRs and the surrounding communities.

The questionnaire was divided into five sections, these included:

1. Establishment of the game reserve;
2. Tourism related activities;
3. Local communities and employment;
4. Environmental and conservation issues; and
5. General economics of establishing and operating a game reserve.

Questionnaires were deemed appropriate to solicit this information as the reserve managers could fill these out at their own convenience. The amount and type of information required by the researcher, involved the reserve managers referring to their records. This could not be done during an interview as it was time consuming.

These questionnaires consisted of a number of open and close-ended questions. The surveys were administered by hand through an initial meeting with each PGR manager, where the research aim and objectives were explained and a confidentiality agreement was signed. Given the sensitive nature of certain questions, it was important to guarantee confidentiality of the data and results. Thus PGRs were assured that confidential business information (such as revenues, staff salaries, etc) would be securely stored and reported on in aggregate form. A copy of the survey was then left with each PGR manager to complete in his own time and was collected at a later date. Out of the five questionnaire surveys that were administered, three

were completed and handed back to the researcher. The two outstanding surveys were completed, at the request of the PGRs, by means of an interview. During these interviews the same survey questions were solicited and recorded by the researcher.

4.4 QUALITATIVE DATA SOURCES

A significant aspect of the research undertaken in this study was qualitative in nature. A qualitative approach was most suited in gathering the views and experiences of the various ex-farm dwellers and community members. Qualitative methods allow the researcher to engage with different people to ascertain how they assign meaning to the world around them (Robinson, 1998). Although qualitative research has often been criticised by positivists as being too subjective, it provides a means to address the complexity of how lives are lived and confronts the fact that people's characteristics and experiences do not group into neat mappable parcels (Smith, 2001). Thus, this research is in part historical-hermeneutic, as it aims to understand the geographical world of its inhabitants through the interpretation of how meaning is constructed. Qualitative research is specifically existentialistic in nature as it focuses on how individuals come to create and place meaning to their world and how they ascribe values to objects and to others (Kitchen and Tate, 2000). This approach effectively takes a historical perspective and endeavours to reconstruct a landscape in the eyes of its occupants in the light of historical situations - in this case the shift in land use from traditional commercial forms of agriculture to PGRs.

4.4.1 Secondary Qualitative Data Collection

Documentary Evidence

Documentary sources collected included:

- Minutes - A desktop review of meeting minutes from the Bayala Farmers Association dating back to the 1940s was undertaken. These minutes were reviewed as they provided documented historical material on agriculture in the study area. Access to these archival documents was kindly granted to the researcher by the owner of the old Farmers Association hall. The hall was originally built in September 1969 when cattle farming activity dominated the study area, but has more recently been sold due to the decline of cattle farming in the region. The review of these minutes involved reading the minutes, drawing common themes and gaining a background to the events prior to the

conversion from traditional agriculture (particularly cattle farming) to wildlife-based forms of land use.

- Books, journals and maps - Literature sources included books, journals and maps. A list of these references may be found in the references section at the back of this document.

4.4.2 Primary Qualitative Data Collection

Primary qualitative data included in-depth-interviews with ex-farm dwellers, a farmer (who is currently farming cattle and game) and participant observation.

In-depth Interviews with ex-farm Workers

Interviews with ex-farm dwellers comprised a key source of primary data intended to gain an understanding of their experiences and perceptions of the land use change from commercial agriculture to wildlife-based forms of land use. This method was chosen over the questionnaire method as it allows for a more casual and often more detailed explanation of the respondents' experiences. It was also pivotal to understand livelihoods prior to the land use shift from commercial agriculture to game.

The interviews conducted with ex-farm workers followed on from the homestead questionnaire survey conducted across the area. One of the questions asked in the homestead questionnaire survey was whether a member of the household had worked or lived on an agricultural farm in the area prior to it being converted to a game reserve. Respondents were selected and listed if they had previously worked or lived on one of the farms that were now under wildlife-based forms of land use and included in the five game reserves part of this study. The final list consisted of 23 names. Five respondents were approached and all gave consent to be interviewed regarding their experiences on the farms.

Structure of the Interviews

In-depth semi-structured interviews with open-ended questions were chosen as the method to gain an understanding of ex-farm workers' experiences. This method was chosen over the questionnaire method as it allows for a more casual and often more detailed explanation of the respondent's experiences. Semi-structured or unstructured interviews take a more conversational and fluid form, allowing the researcher and the respondent to have a far more

wide-ranging discussion, often producing deeper information and often raising issues that the researcher didn't anticipate (Valentine, 2005).

Interview Process

A meeting with the Induna was set up prior to the commencement of any interviews or surveys being conducted. This ensured that the Induna was aware at all times of what was happening and in most instances community members were made aware that there was research being conducted in the area. Upon meeting the respondents at their households, pleasantries were exchanged and an introduction was provided. Robinson (1998: 415) suggests that this introduction should "include a clear explanation of what the interview will entail and its purpose and reference to ethical considerations (for example, non-disclosure of an individual's name or personal information) and to any procedural matters relating to the interview (for example, note taking and the use of a tape recorder and translator)". As with the household livelihood surveys, these interviews were conducted with the assistance of a Zulu translator. The respondent was made aware of the research being conducted in the area and permission was requested to make use of a tape recorder. A recorder was utilised as all interviews required translation and transcription at a later stage. Using a recorder ensured that the conversation flowed freely and that the respondents felt comfortable and could express their opinions without being interrupted. This allowed for accurate transcription at a later stage.

Cattle Farmer Interview

All five of the game reserves selected for this study were previously under agriculture. However, currently they are not owned or managed by the original farmers. In order to gain a first-hand understanding of why farmers were selling their farms and livestock and allowing their farms to be converted to game, the researcher attempted to set up interviews with farmers that had previously farmed in the area. During the initial pilot study a cattle farmer was interviewed and the snowball method was used in an attempt to establish names and contact details of those farmers who had sold their agricultural land that was now under game. A list of five farmers was established. However, despite numerous attempts, none of these farmers could be reached. Some had emigrated.

An interview with a current farmer, who has farmed in the region for generations and who currently farms both cattle and game, was however undertaken. This interview was used to

gain an understanding of the area and establish how and why land use in the region has shifted. The interview utilised the informal conversation method but was guided by the questions set out in the aim and objectives. This interview was recorded to allow the conversation to flow freely.

Participant Observation

Participant observation is a method that has been borrowed from the field of anthropology and involves immersing oneself in the research setting and observing the interactions, relationships, actions and events that take place therein in a systematic manner (Robinson, 1998). This method involves spending a considerable amount of time with the group that is being researched and involves recording the observations of daily life experiences (Robinson, 1998). Observation in research relies on the observer's capacity to understand what is going on in a situation and why it is taking place (Kitchin and Tate, 2000).

Participant observation took place in three different contexts, these included:

- Staying with wildlife managers at Thanda, Intibane and Kube Yini PGRs;
- Participation in reserve management activities with the various game reserve managers;
- Participation in game capture activities within the game reserves and the community; and
- Living in the community of Ingwenya for periods of time throughout the research project between the dates of July 2007 and March 2009.

In order to gain an understanding of the process of agrarian change from commercial agriculture to wildlife and how nature is being commodified, time was spent at three of the five PGRs. This included time with PGR managers who were directly involved in rehabilitating agricultural land and establishing the PGRs. The researcher got directly involved at Intibane and Thanda PGRs, assisting with burning regimes, invasive alien eradication, fence patrols, game monitoring, game counts, culling and game capture. Informal discussions with staff members were undertaken whilst working on these farms.

The researcher also participated in the capture of a rhino that broke out of Thanda PGR into the Igabadela community lands. Time was spent assisting the game capture unit locate and capture the rhino. Observations were made of community responses to the rhino and game

capture unit moving into the area. Time was also spent interviewing the Thanda anti-poaching unit (APU) through informal interviews.

In order to gain more of an “insider’s” perspective, and a perspective from “the other side of the fence” the researcher also spent periods of time, throughout the research, staying in the community of Ingwenya. The purpose of this was to obtain a better understanding of the way the community lives and to observe their day to day routines. In order to do so, the researcher consulted the Induna of the community. Temporary accommodation was set up within an abandoned crèche. Whilst in the community, time was spent having meals with a local family, spending time with community members and assisting women in their daily tasks (such as carrying water and chopping wood). Initially the researcher was accompanied by a UDT member into the community. Community members were made aware of the research being conducted and gradually the researcher got to know a number of community members. Once community members became familiar with the researcher, time spent in the community was spent alone, without a UDT member present. A motorbike was utilised to get in and out of the area as many parts were not accessible by road without a 4x4.

4.5 DATA ANALYSIS AND INTERPRETATION

4.5.1 Quantitative Data Analysis

Household Livelihood Questionnaire Surveys

Once the data collection process was complete, prior to formal analysis, the data was coded. This involved assigning numbers to the range of responses obtained to each question in all questionnaires. These codes/numbers were recorded along with the range of answers in a code book. The codes were then entered into a Microsoft Excel spread sheet. Due to the substantial amount of data entered, to ensure there were no errors, the data was checked for magnitude variations and variable consistency. In addition, selected survey data was re-entered into another spread sheet and both sets compared to verify accuracy.

The statistical package Statistics Programme for Social Sciences (SPSS) was then utilised to analyse the data. General descriptive statistical analysis was undertaken and frequencies calculated. The analysis was directed by the types of answers required in order to establish the livelihoods of the community, as set out in the DFID (1999) guidance sheets and discussed in *Chapter Two*.

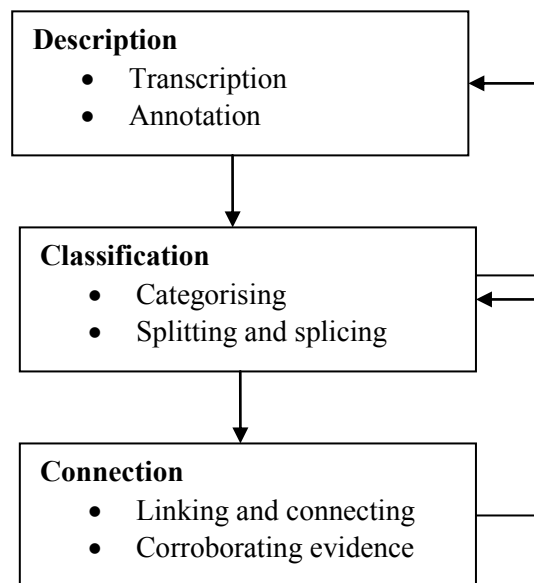
Game Farm Managers, Questionnaire Surveys

As per the livelihoods questionnaire survey, the quantitative data for this survey was coded, entered into a Microsoft Excel spread sheet, checked for errors and initial data analysis undertaken. The analysis was guided by the key objectives and sub-questions stipulated in *Chapter One*. The data set for each PGR was analysed using Microsoft Excel, through the use of basic statistical analysis and through the generation of histograms. Common trends and themes were identified and noted. These notes were compared against the answers from each PGR and against the qualitative data obtained through other questions in the survey, notes made from informal interviews and participant observation.

4.5.2 Qualitative Data Analysis

The qualitative data collected for this study (namely ex-farm worker interviews, farmer interview, participant observation and sections of the reserve manager's questionnaire surveys) was analysed using an interpretive approach, which emphasises the role of patterns, categories and basic descriptive units (Paton, 1990, cited in Kitchen and Tate, 2000: 229). Each interview was conducted, recorded, translated and transcribed by the researcher and translators, after which common themes were identified from the transcribed interviews. Dey, (1993, cited in Kitchen and Tate, 2000: 235) describes this approach to qualitative data using an omelette analogy, suggesting that one cannot undertake data analysis without breaking it into bits and beating the bits together, as one would when making an omelette. Dey (1993, cited in Kitchen and Tate, 2000: 235) suggests that the core of qualitative data analysis consists of *description* of data, *the classification* of data, and seeing how concepts *interconnect*. In this way data is not merely described but meanings may be interpreted. This is further illustrated in Figure 4.2.

Figure 4.2 Description, Classification and Connection of Data



Source: Dey, 1993 (cited in Kitchin and Tate, 2000: 235)

The first stage of data interpretation and description involves the portrayal of data in an accessible way for later interpretation. Transcription of the data into legible format is the first step and should be done as soon as possible after the completion of an interview. Annotation of the transcribed material involves writing notes on the side of the transcribed material and asking questions about the responses to aid the classification later on (Kitchin and Tate, 2000).

The second stage of data interpretation is the classification stage where different codes are allocated to the data in a first attempt at interpreting and making sense of the data. This stage involves breaking up the data and placing it in different categories, each of which has a code. Splitting and splicing is an important step in this stage. Splitting involves breaking up the categories into further sub-categories in order to start working out the relationships between data collected. Splicing on the other hand involves the joining of data categories which are related. This helps with the integration of categories and understanding how different themes relate to each other. Thus this stage involves the identification of classes of data (Kitchin and Tate, 2000).

The third stage according to Dey (1993, cited in Kitchin and Tate, 2000), is the connection stage where relationships and associations between the classes or categories that were

identified in the previous stage, are identified and understood. Interactions between the classes are searched for in order to gain a better understanding and for meaning to be grasped (Kitchin and Tate, 2000).

In this study, the above approach to interpretation was followed. Before conducting all interviews a descriptive observation was made of the location of the interview, the name of the respondent, the date and the time. The situational context was written up to allow the researcher to situate the analysis. “It is well known that the social, spatial and temporal context can all significantly affect the data generated thus one must take into account any factors that may have influenced the nature of the data before conducting analysis” (Kitchen and Tate, 2000: 231). The data collected was in the form of voice files and hand written notes which was translated and transcribed immediately after the interviews (*description phase*). “Open coding” was conducted as soon as possible after each interview. This entailed the reading through of transcribed material, making notes in the margin (Crang, 2003). This was intended to assist in the *classification stage* as it is useful in generating ideas and identifying themes in the data.

The questions within the interviews were structured around the research objectives which were referred to throughout all stages of the data collection process. This assisted in structuring the data collected into broad themes. The categories were thus developed empirically as well as from the theory developed in the theoretical framework, discussed in *Chapter Two*.

4.6 LIMITATIONS

When undertaking any research there are always limitations. For personal reasons, the data analysis and final write-up stage of this dissertation were significantly delayed. Post-data collection, the researcher accepted permanent employment at an environmental consulting firm. Consequently, although a rich and comprehensive data set was collected in the first year of study, the analysis and write-up of this dissertation was slow, sporadic and much of the momentum was lost.

In the field itself, one limitation was the fact that the researcher could not gain an interview with any municipal officials. It was considered important to establish their position on the land use change from commercial agriculture to PGRs and the effect they believed it may

have on local communities. The researcher also wanted to establish the services the municipality provided to the community of Ingwenya. However, despite numerous attempts, failed meeting appointments on the behalf of officials and a complete lack of interest in answering questionnaires or even informal interviews meant that no information was obtained from the local or even the district municipality. This, however, may be an answer in itself.

Another limitation of the study was the difficulty in locating a representative number of ex-farm workers, as was initially intended, in order to establish the relationships between the community of Ingwenya and the farms before they were converted to game reserves.

Social research is acknowledged to be subjective and influenced by the researcher's positionality, worldviews and interpretations. Thus many limitations are encountered in qualitative data collection and particularly analysis. This is due to the fact that the researcher may choose which approach to employ, what data is important and how to represent the data. This is not always a conscious choice and may be biased by the researcher's background, culture, interpretation and opinions. The researcher did, however, try to ensure any bias was kept to a minimum by setting key questions before conducting the research to ensure the questions were not "directive" (Robinson, 1998). In addition, the researcher is a white male that was brought up in a middle to upper income family, although his background and culture may have assisted in gaining access and trust from the various game reserves, this may have been a limitation in the data collection process due to the communities perception of the researcher. This was mitigated through the use of two local isiZulu translators that assisted in all interviews and household surveys.

Despite the limitations involved in this study, the researcher was fortunate to gain access to not only the community of Ingwenya but all five game reserves selected in this study. The many stakeholders involved in this research were particularly obliging and a considerable data set was collected within the first year.

4.7 CONCLUSION

This research aimed to understand the livelihood outcomes and experiences of the community of Ingwenya as land use in the area has shifted from conventional agriculture to game farming. The study was both quantitative and qualitative in nature which involved collecting household questionnaire surveys, in-depth interviews, and oral and documentary evidence. In

addition to this method, participant observation was employed. Throughout the research, the researcher's position had to be acknowledged and the ethics of the research continually reflected upon. A relationship of trust that was established between the researcher, members of the community and game reserve managers enabled the researcher to gain valuable information from both sets of stakeholders. *Chapter Five* discusses the results that were found in this study.

5 CHAPTER FIVE – DATA ANALYSIS, DISCUSSION OF FINDINGS

5.1 INTRODUCTION

This chapter presents the results of the research carried out according to the methodological principles described in *Chapter Four*. In order to achieve the aim and objectives of this study and answer the sub-questions posed in *Chapter One*, this chapter firstly presents information on the agrarian history and more recent land use change that has taken place across the study area, looking at how and why nature is being produced and sold instead of the more common agricultural commodity of cattle. It elaborates as to why this land use shift has taken place and provides details on the establishment and current tourism activities of the five game reserves selected in this study. Secondly, this chapter moves on to present a profile and current livelihood status of the average household in the community of Ingwenya in order to ascertain the significance the land use change may have had on the livelihood strategies of ex-farm dwellers and more specifically the community of Ingwenya. Lastly, taking into account all that has been examined, it explores the current relationships between the five game reserves and the community of Ingwenya.

5.2 AGRARIAN CHANGE – THE PRIVATISATION AND PRODUCTION OF NATURE

5.2.1 Historical Land Use and the Shift from Traditional Agriculture to PGRs

As was highlighted in *Chapter Three*, the history of Zululand is a complex one, not only due to the struggle between different groups for land and power but one of conflict between nature and society to exist in this unsympathetic landscape. The various agricultural undertakings in the study area proved that it was not particularly suited for crop production, including sugar, cotton or sisal. In addition, the presence of game and the *Nagana* outbreak in the region devastated the farming of cattle in the area. Inadequate rainfall, agricultural crop and market failures, employment conditions, malaria, and in particular *Nagana* seem to all have played a role in the desirability and eventual conversion from conventional forms of agriculture to game farming.

Although it was found that all these factors may have contributed to the attractiveness of converting from conventional agriculture to game, it appears that the transition was not entirely based on these denominators. It certainly was not *Nagana* that caused the conversion from cattle to game, as cattle numbers in the study area seem to have increased after the

Nagana epidemic. For example, “the Bayala Farmer’s Association hall was built in September 1969 from money that was made from commission made from cattle sales in the study area. Cattle farming in this area was reasonably big and people didn’t go directly over to game” (W. Botha, *pers comm*, 2007). Game reserves had existed in the area since the early to mid-1900s (Mkuze, Hluhluwe and Umfolozi), and the conversion to PGRs seems to have been a much slower process than initially thought. As was evident in the analysis of the Bayala Farmer Association minutes (1940 – 1985), the historical relationship between cattle and game was capricious, with many farmers being anti-game during much of the period between the 1950s and 1980s, with numerous calls to abolish the various state reserves and control game in the region. Despite the disappearance of *Nagana* in the 1950s, the veterinary department and local farmers appear to have remained fairly anti-game for quite some time following this. For example, Phinda PGR was the first private reserve in the area, shifting from large-scale agriculture over to game in 1990, and it appears that this distrust was still particularly apparent during this time. According to Les Carlisle, who was responsible for the introduction of game back into the area (cited in Buchanan, 1999:13):

When the Phinda Project was started in 1990 it was up against a political and legal system that favoured a failing agricultural system. You could have had as many head of cattle as you wanted. But if you didn’t already have wildebeest, a far more viable option, you weren’t allowed to bring them onto your land. The same thing applied to all other wildlife.

Game was seen as opposition to cattle farming and agricultural practices, however, this seems to have changed over time and numerous agricultural farmers seem to have started by purchasing game from the state reserves, keeping a mixed land use. “The parks board eventually realised that they could make money off selling their excess game rather than culling” (G. Dedricks, *pers comm*, 2007). A number of farmers still keep a mixed land use, however, there are not many farmers left in the area, particularly cattle farmers. As one of the current cattle farmers pointed out, “In 1982/83 the cattle count from Candover to Hluhluwe was in the region of 85,000 head of cattle, the last count indicated only 5,000” (G. Dedricks, *pers comm*, 2007).

Although many cattle farmers began keeping both cattle and game, this research indicated that the more contemporary emergence of PGRs came about not from farmers converting from cattle to game but rather from outsiders coming into the area and establishing PGRs. “These people with money came into the area and started farming game for the love of it” (W. Botha, *pers comm*, 2007). The research undertaken in this study indicated that the majority of

the PGRs in this area were established and are owned not by ex-farmers but by wealthy private individuals that have come into the area from other regions and bought out cattle farms, dropping fences and establishing large reserves. This was the case for all the PGRs selected in this study.

The difficulties associated with cattle farming in the region, coupled with the increased popularity of the state reserves in Zululand (including Mkuze) as tourism destinations and the investment and push from the Phinda Project and its wealthy and influential investors saw a far greater interest in creating private reserves. From the 1990s, marginal cattle farms were thus slowly sold off, rehabilitated and converted to PGRs. The formation of these PGRs initially saw two predominant types of establishments, either hunting operations, with fairly rustic accommodation, or luxury lodges catering for the growing wildlife tourism industry in KZN.

Another factor as to why the Northern Zululand region has become such a popular location for the establishment of PGRs, rather than other areas, is the fact that despite the various historical agricultural undertakings in the area, the area still contained certain vegetation types which are particularly suited to game (Govender, 2011)⁷. The Isimangoliso Wetland Park, Lake Sibaya, Mkuze and the pockets of biodiverse vegetation on agricultural farms all contributed to the wilderness attraction of the region. These vegetation types range from dry sand forests, forests, coastal forests, woodlands to open grasslands and savannah. These vegetation types allow for the big five species as well as species typical of the African bush, such as giraffe, cheetah, zebra and hippo, species which fit into the wilderness paradigm of tourists.

5.2.2 Producing Nature

With the shift in land use from cattle to game, the landscape in the study area has clearly taken on new cultural meanings and representations that are rather contradictory of the reality of the area. As has been discussed in *Chapter Two*, due to the expectations of tourists, game reserves are constructed in both the physical and discursive sense in order to reflect a “wild Africa”. The fact that the study area was predominantly under intensive agriculture less than a decade ago, does not fit into the stereotypical idea of wilderness which is the basis on which

⁷ The data from which this conclusion was derived was from Govender, 2011. This data was made available as this dissertation was a part of a larger research project funded by SANPAD.

these reserves are marketed. Thus these spaces have been manipulated and certain images portrayed in order to sell the idea of nature and wilderness. This was particularly evident, although to varying degrees, in all five game reserves selected in this case study. This ranged in each reserve from the careful use of architecture and décor in the construction of lodges, the manipulation of ecosystems, theatrical cultural shows, to the controlling of the tourist experience.

Physical Construction

The architecture and layout of all the lodges in the reserves selected in this study have cleverly been constructed to make the visitor feel as though they are a part of nature. Set into the side of a hill, on the edge of a cliff or next to a watering hole, the guests are made to feel that they are isolated and in pristine wild Africa. The architecture, décor and even the uniforms of the front of house staff, in the majority of the lodges is African colonial, making the visitor feel as though they have entered an area suspended in time. Two of the reserves in this case study even go to the extent that they do not permit guests to drive their own vehicles in the reserve, rather, guests are met at the gate by a game drive vehicle on arrival and are driven around for the duration of their stay. All evidence of modernity is kept out of sight. In all the reserves, guests are not made entirely aware of the large amount of work required in the operation and management of a game reserve. But rather, they are presented with the idea that the reserve is an area preserved in its unspoiled, primordial state. Guests are not shown the methods often used to thin the bush to allow for better game viewing, the culling of animals, the rehabilitation of agricultural land and the militaristic security involved to keep the game in and people out. There is a constant illusion created for the guests that they are in an expanse of pristine African bush. This was particularly apparent at all the PGRs selected in this study, despite the various histories of cattle farming and a population of approximately 200,000 people surrounding these reserves, the tourist is made to feel that they are in a primitive colonial African wilderness.

Discursive Production

Thanda PGR and its Vula Zulu “traditional” Zulu village is a prime example of how a particular experience is produced for the tourist. Vula Zulu (Plate 5.1) is a replica of a Zulu village that has been constructed within the reserve that showcases Zulu culture and history. As is evident in the creation of this space and on Thanda's website (Thanda, 2009) and other marketing material reviewed as part of this thesis, the tourist is invited to become involved and experience the preserved and sacred Zulu culture:

Established as a living museum, Vula Zulu discloses the sacred rites of passage and age-old traditions that define the descendants of King Shaka through one of Africa's oldest forms of theatre: dance. Guests are invited to taste traditional beer, made privy to the intricacies of basket-weaving and observe the art of spear combat as the cry of the *impi* reverberates through the village. The traditions of the performers are preserved as they do not reside at the homestead but return to their homes in the tribal land after each public performance....Vula Zulu, is one of the only authentic cultural experiences to be found in the country.

The Vula Zulu show is completely staged and managed by Thanda, to enhance the tourist experience of the reserve as a primordial space that is preserving pristine nature, wild animals and the traditions and culture of primitive natives. The idea that the performers return to the adjacent tribal areas, thus leaving the reserve in its preserved state is somewhat contradictory with the use of the word “authentic” as the background and reality of the performers and the adjacent tribal areas is not communicated or is possibly of little interest to the tourists visiting Thanda and the other PGRs in this case study.

Plate 5.1 Photos of Vula Zulu Village



The shift in land use has resulted in the Northern Zululand region becoming a popular “ecotourism” area with a particular experience manufactured and sold to guests. The next section presents information on the tourism operations of the five game reserves selected in this study.

5.2.3 Description of the Ecotourism Product of the Five Game Reserves

Biggest Attractions

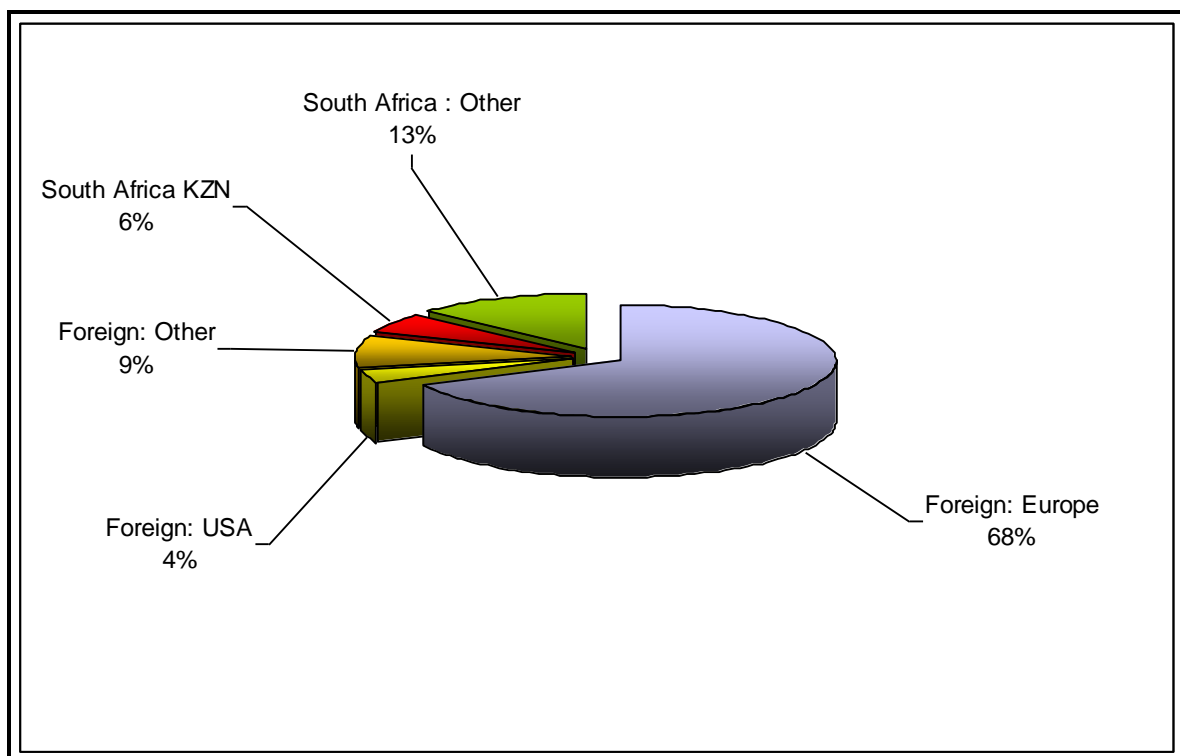
According to the PGR manager interviews, the single biggest attraction for tourists visiting the reserves was wildlife and in particular the Big Five. The second most important feature was the “pristine natural beauty”, picturesque landscape and the wilderness of the reserves.

Other draw-cards mentioned included the location of the reserves to Durban and other natural attractions on the KZN east coast, such as the Isimangoliso Wetland Park and the number of other PGRs in the region.

Tourist Origination

Given the high prices charged per person per night at the PGRs selected in this study, the marketing of these reserves target predominantly the foreign upper income market and clientele such as Europe, including Germany and the UK. It was found in the survey results that 81% of the clientele visiting these reserves were from outside of South Africa ⁽⁸⁾ (Figure 5.1). Mkuze is visited more so by the South African middle to upper income population than any of the other reserves.

Figure 5.1 Tourist Origination



5.2.4 Economic Review of the Five Game Reserves

Establishment Costs

The results of the in-depth PGR questionnaire surveys undertaken as part of this research indicate that setting up a PGR is a costly undertaking, requiring an initial outlay of anywhere

from R15 million to R300 million. The total expenditure of each of the PGRs in this study differ due to their date of establishment, management focus, nature of ownership, size of the property, tourism operations etc. However, the primary expenditures were associated with land purchase, accommodation construction, game purchase, infrastructure (roads, water provision), rehabilitation programmes, equipment (vehicles) and fencing.

Tourist Accommodation, Capacity, Prices and Income Potential

The five game reserves selected in this study have the capacity to cumulatively accommodate in the region of 580 guests ⁽⁹⁾. Thanda, Phinda and Mkuze are the only three reserves selected in this study that are open to the general public. Kube Yini is owned by shareholders and as such is only open to these shareholders and their guests. Intibane, since its incorporation into Thanda PGR, no longer accommodates tourists. Table 5.1 indicates the capacities and income potential of the three public accessible reserves. With the average cost per person per night equating to R3,474.00, these reserves clearly target the foreign market and have the potential to cumulatively bring in close to a million rand per night. This excludes the added revenue and multiplier effects of such tourism.

Table 5.1 Tourist Accommodation: Capacity, Prices and Income Potential

Capacity	Total number of beds	254
	Average Number of Beds	84
Price	Average Price per person per night	R 3,474.00
	Range in Price (Minimum to Maximum)	R75.00 - R6,700.00
Income Potential	Maximum potential income per night	R 961,795.00
	Average Maximum potential income per night	R 320,598.00
	Range in potential income	R26,005.00 - R729,940.00

Note: These figures are for Thanda PGR, Phinda PGR and Mkuze Game Reserve only.
 These figures are based on an average between in and out season rates
 Due to confidentiality agreements, these figures had to be presented as aggregates.

Employment

Table 5.2 provides details on the number of employed staff, both permanent and temporary of each of the game reserves selected in this study. The average number of permanent employees per game reserve was found to be 99. Permanent positions include: lodge management staff, finance staff, administrators, game guides, cleaning staff, chefs, maintenance staff, APUs and spa staff). These individuals earn in the range of R1,800.00 to R15,000.00 per month. It should be noted that the vast majority of the permanent staff were not from the local communities directly bordering the reserves but were from farther afield, such as Mtubatuba,

(8) Kube Yini and Intibane PGRs were not included in the calculation of this figure as they do not cater for tourists. The accommodation at Kube Yini is owned by private individuals for their own use and is not open to the public.

Empangeni, Durban and Johannesburg. It was found that on average there were 20 temporary staff members per game reserve, in a typical year. Temporary employment includes: alien invasive vegetation control teams, armed patrols (outsourced), maintenance staff and casual labour. Temporary staff were found to typically earn between R65.00 – R80.00 per day and may only find employment seasonally (during the burning season before summer rains, when and if maintenance calls for temporary staff, when permanent staff are on leave, etc.). 90% of temporary staff were found to be from local communities.

Table 5.2 Employment at each Game Reserve

Game Reserve	Number of Staff	
	Permanent	Temporary
Thanda and Intibane PGRs	140	25
Kube-Yini PGR	16	15
Phinda PGR	140	50
Mkuze Game Reserve (State owned)	100	50

Note: The total number of employees (both temporary and permanent) are reflective of the time of this survey, however, it was evident that these figures fluctuate throughout the year as all the reserves indicated a high staff turnover.

Unfortunately, a comparison of employment numbers under commercial agriculture versus PGRs could not be established due to the lack of accurate/documented figures of those employed under commercial agriculture operations before conversion to game. However, in interviews with both PGR managers, current farmers in the region and ex-farm workers, it was clear that the number of those employed under tourism is substantially higher than under commercial agriculture. The results indicated that labour on agricultural farms was also particularly seasonal within the study area.

In addition, the salaries/wages earned at PGRs as opposed to agricultural farms appears to be significantly higher. It was particularly apparent during interviews with ex-farm dwellers/workers that salaries on farms have historically been quite poor.

In 1987 on that farm (previously Sungalwane) we worked for a little income. They paid us between R100.00 – R200.00 a month. We didn't work there to stay but came home on the weekends (J. Mtshali, *pers comm*, 2008).

The average income (for general labour) was found to range between R6.00 to R1,800 per month during the years 1957 and 2007 on agricultural farms ⁽¹⁰⁾.

(9) This figure includes Kube Yini, Intibane and the camping facilities at Mkuze.

(10) It should be noted that this was taken from a small sample frame of five ex-farm dweller interviews. This was, however, authenticated through discussions with farmers in the area.

Employee Benefits and Staff Training

Employment numbers only tell part of the story of the contribution that PGRs make to the livelihoods of rural communities. All of the game reserves selected in this study indicated that they provided their employees with some form of perk or benefit. These included: the provision of food, accommodation, a vehicle, transport, Unemployment Insurance Fund, provident fund, health care, personal loans, uniforms and clothing. In addition to benefits, all of the reserves had sent certain members of their staff on some form of training. This included drivers licence training, basic maintenance and building courses, hospitality courses, alien invasive vegetation training, first aid courses, ecology and rifle training. This training is for the most part the only tertiary education that is obtainable for the local communities, which do not have the resources or the standard of education to allow them to study further.

Multiplier Effects

It was particularly evident in this case study that PGRs have a significant multiplier effect in the regional economy, this includes direct expenditure into the buying of local crafts, renting cars, flights, purchasing clothes or memorabilia, visiting other attractions and dining in restaurants. In addition, the construction and maintenance of the lodges and the maintenance of the reserves has created (although fairly limited) employment to local residents. As seen in Table 5.1, above, the combined earning power of the game reserves selected in this study area (which are only three of over a hundred reserves in the area), coupled with the multiplier effects of tourism, have the potential to make a large economic impact on the area. This impact is also compounded by the fact that there are numerous reserves in the area. As one of the pilots who fly guests in and out of the area commented:

Guests most often don't stay at one reserve for the duration of their trip, often I fly guests from one reserve to the next with them visiting three or four reserves on one holiday. Most of the exclusive reserves have their own airstrip.

The existence of tourism in the region and the evident multiplier effects that are created as a result, have clearly diversified the economy of the study area. In interviews with ex-farm workers it was evident that greater infrastructure has been established in the region subsequent to the more recent development of PGRs, in particular the towns of Mkuze and Hluhluwe were noted to have grown significantly. Interviews with the game farm managers and residents in the study area noted that agriculture in this area was on the decline and that if tourism establishments hadn't developed, the area would suffer from a total economic decline

and possible collapse. PGRs appear to have provided more alternatives to agricultural in terms of diversity of industry demands. Despite this, due to the rural nature of the region, limited infrastructure in the tribal areas, lack of education and the isolation of the communities, many of them do not benefit from these opportunities at all.

5.3 PRODUCING NATURE AND POVERTY? – THE IMPACT OF PGRS ON RURAL LIVELIHOODS

An assessment of PGRs impact on the community of Ingwenya depends not only on its direct costs and benefits, such as investment into the region and jobs generated, but on a range of indirect, positive and negative impacts. The DFID (1999) SLA was used in an attempt to disentangle the various components that make up the livelihoods of the average household in the community of Ingwenya. These are discussed further here.

5.3.1 Profile of the Average Household in the Community of Ingwenya

Human Capital

According to DFID (1999), human capital represents the skills, knowledge, ability to labour and good health that together enable people to pursue different livelihood strategies and achieve their livelihood objectives. As well as being of intrinsic value, human capital (knowledge and labour or the ability to command labour) is required in order to make use of any of the four other types of livelihood assets (DFID, 1999). It is therefore necessary, though not on its own sufficient, for the achievement of positive livelihood outcomes. At a household level, human capital essentially is a factor of the amount and quality of labour available. It is thus a building block or means of achieving livelihood outcomes (DFID, 1999).

Household Demographics

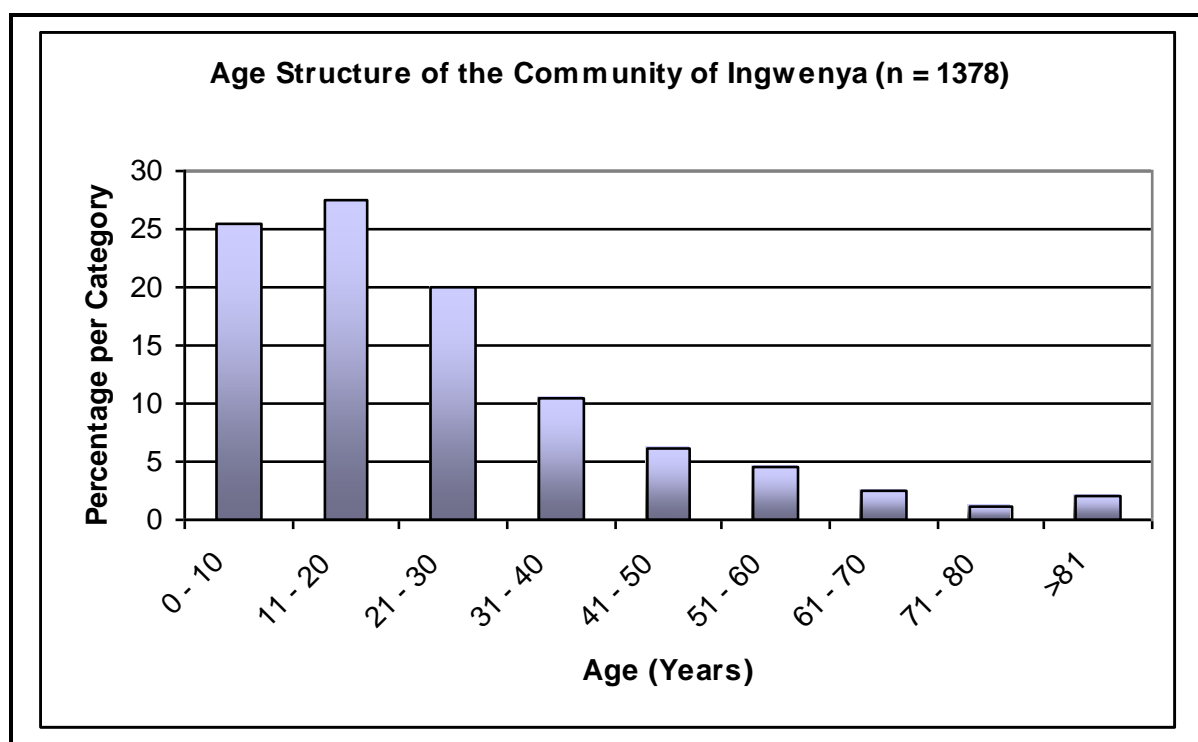
The community of Ingwenya ⁽¹¹⁾ has a total population of approximately 1,392 people, residing in an area of approximately 17km². As described in *Chapter Three*, the community is extremely rural in nature and follows a scattered settlement pattern, consisting of traditional homesteads. These family homesteads or “households”, typically consist of two to three sleeping structures, outside cooking area and a store room. The community of Ingwenya has a

(11) This includes the tribal areas administered by Induna Mtshali and Induna Nkosi

total of approximately 167 homesteads (161 of these were surveyed) with an average of 8.5 people per household.

The age structure of the community (Figure 5.2) is vastly imbalanced, with a total of 53% of the community under the age of 20 years and almost 6% over the age of 61 years. This indicates that only 40% of the community is typically of the working age. Thus the community has an extremely high dependency ratio. In addition, there is a slightly skewed gender profile with 45.8% males and 54.2% females. This is, however, not surprising as rural urban migration is certainly part of the community of Ingwenya's livelihood strategy, where men travel to cities in order to find employment.

Figure 5.2 Age Structure of the Community of Ingwenya



Education Levels

As may be seen in Figure 5.3, education levels of the community as a whole are extremely low, with 44% of the population having no formal education and only 8% having completed matriculation. This is despite two schools (primary and secondary) located within the community. As typical of most rural schools, these schools are fairly basic in terms of infrastructure (Plate 5.2) and the quality of the education is relatively poor (N. Hawkey, *pers comm*, 2008). This is compounded by the fact that there are between 40 and 90 pupils per class. It was also noted whilst living in the community of Ingwenya that school attendance

dropped when bad weather was experienced. The distance that children have to walk to school each day is on average is between 2 to 4km. According to discussions with the principal of the high school and the UDT, the level of education has, however, vastly improved. The construction of improved staff accommodation by the UDT in 2009 has increased the number and quality of teachers at the high school. In addition, Phinda PGR funded the construction of a number of classrooms at the high school. The improvement in the level of education is evident in the matriculation pass rates. The matriculation pass rate increased from 17% in 2007 to 53% in 2010. Although the pass rates have increased significantly, only a small percentage of these matriculants study further and find employment in the skilled labour market each year (N. Hawkey, *pers comm*, 2011). It is, however, clear that the contributions made by many of the PGRs to improved educational infrastructure has made a significant contribution to education levels in the community of Ingwenya.

Figure 5.3 Education Levels of the Community of Ingwenya

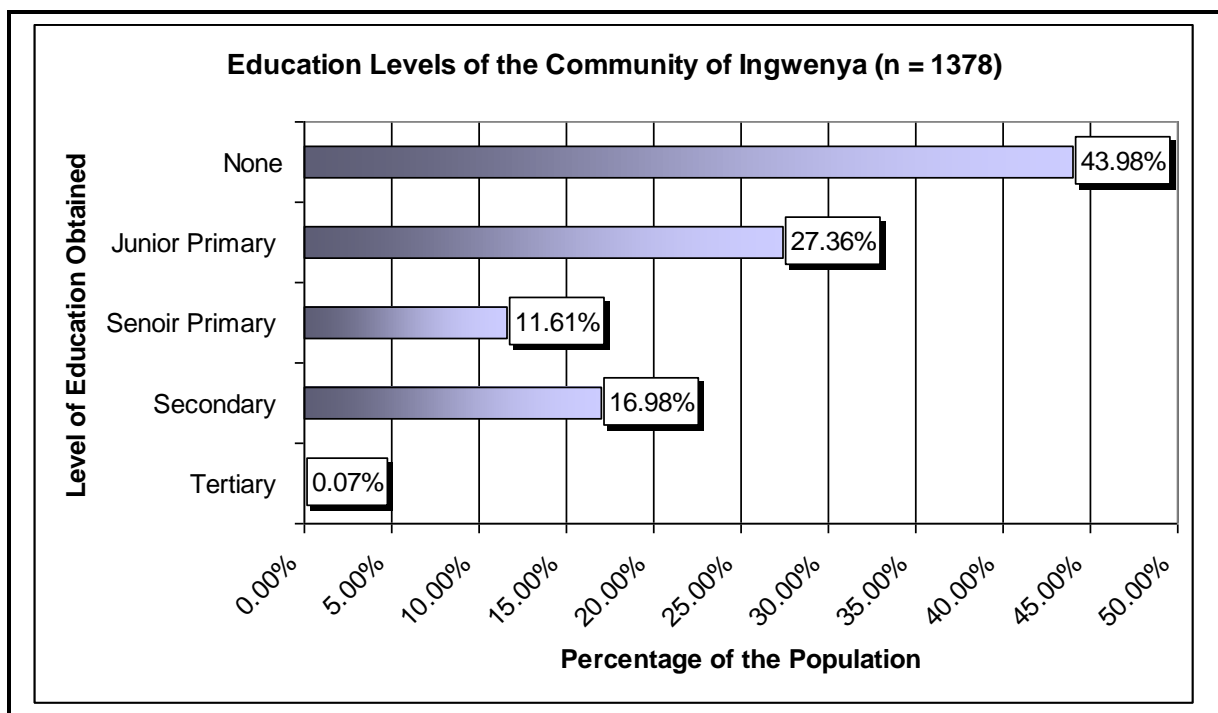


Plate 5.2 Ezimbedleni Primary and Mtolomba High Schools in the Community of Ingwenya



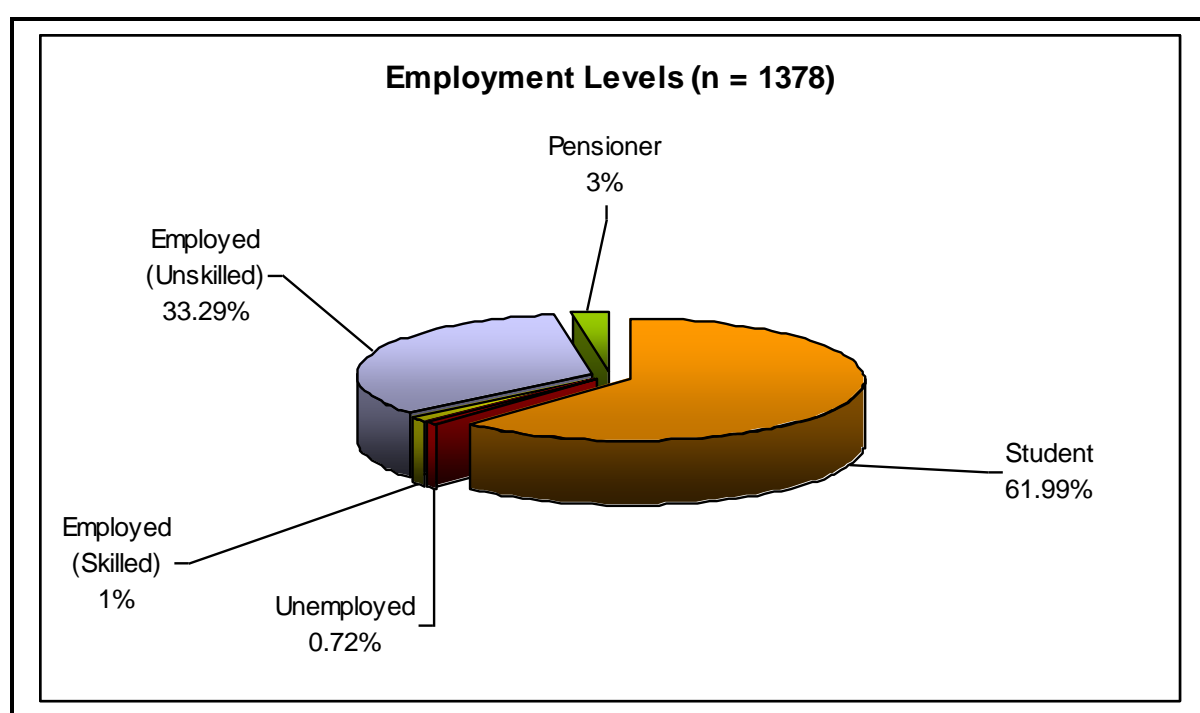
Employment Levels

Despite the fact that the questionnaire survey results indicated that unemployment levels within the community of Ingwenya are extremely low (1%), employment levels are also particularly low, with only 34% of the community employed (both permanent and temporary), in predominantly unskilled positions (Figure 5.4). The vast majority of those employed are employed on a temporary basis, only finding occasional work, on average every 2 to 3 months. In general socio-economic terms, these individuals would be considered unemployed, however, most individuals in the community associated having temporary employment at some point as being employed. Nevertheless, the employment statistics of the community of Ingwenya are low. This may largely be attributed to the age structure and education levels of the community, as discussed above. Given that 65% of the population are still at school or are on pension, this leaves a small percentage of the population in the job market. An important point to note here is that the survey results indicated that although unemployment is low (which should be considered a positive aspect), employment levels are also low due to the vast majority of the population still being at school. What is clear here is that despite the fact that unemployment is low, so is the amount of people able to work.

The majority (86%) of those employed are employed locally. With the remaining 9.7% and 4.3% finding work through migration to cities within KZN or other provinces, respectively. It was found that 89 individuals, equating to 19% of those employed (both skilled and unskilled) were employed by a local PGR. These PGRs include Phinda, Mziki, Zuka, Kube-Yini, Sungalwana, Zulu Nyala, Zululand Rhino Reserve and Mkuze. Given the number of reserves in the study area and that the community of Ingwenya is geographically bordered to the south,

east and west by game reserves, there appears to be little employment offered to local communities. The reserves assessed as part of this study employ in the region of 400 permanent staff and 140 temporary staff, very few of those employed, however, seem to be from the community of Ingwenya. This is thought to be attributed to a number of variables, including a limited number of community members at the working age, lack of education and skill levels required for employment at a game reserve, the isolated nature of the community of Ingwenya in relation to the game reserve entrances, and a hand out mentality that appears to be rife in the community who rely to the most part of government remittances.

Figure 5.4 Employment Levels of the Community of Ingwenya



Health Status

In the household questionnaire survey undertaken across the community of Ingwenya, the respondents were asked to indicate the general health status of each individual residing at the residence. Of the 161 households surveyed, 83% indicated that they were generally healthy, 4% indicated that there was a member of the household that has a physical disability (which prevented them from working) and the remainder (17%) indicated that there was a member in the household that suffered with ill health in general. The community, due to its isolated nature, has limited accessibility to health services. The majority (80%) of the community use Mhleka clinic which is close to the town of Mkuze (some 27km away), as their primary health care facility and the remainder use mobile clinics. Given the lack of transport infrastructure within the study area, these distances are extreme. The community of Ingwenya

has only two mobile clinic stopping points that are serviced once a week. The Mhlelezi clinic is the only clinic in the region that has a doctor on call. The mobile clinics only have nursing staff that provide only very basic medical attention. This study found that many locals could not find employment or tend to their subsistence agricultural undertakings due to ill health. Most of the temporary jobs at PGRs are labour intensive. Ill health precludes community members from obtaining jobs at local PGRs.

Social Capital

Social capital is a much debated term, however, in the context of this study, it is defined as: “the social resources upon which people draw in pursuit of their livelihood objectives. These are developed through: networks and connectedness; memberships of a more formalised group; and relationships of trust, reciprocity and exchanges that facilitate co-operation, reduce transaction costs and may provide the basis for informal safety nets amongst the poor” (DFID, 1999: 3). Social capital is thus important as it provides a buffer that may help a household cope with periods of intense insecurity, lack of other assets or from external shocks. Thus, social capital has a direct impact upon other types of capital.

The debate around social capital is not what it encompasses but rather how exactly one quantifies it. Levels of social capital are hard to gauge as they are not always discernible without lengthy analysis (Scoones, 1998). Although the analysis of social capital undertaken in this study may not be considered a true reflection of social capital, the intention was rather to establish the main social activities and networks that the community of Ingwenya partake and rely on. Social capital may provide an indication of a community’s security, as well as provide an indication of people’s general sense of well-being through a sense of identity, honour and belonging.

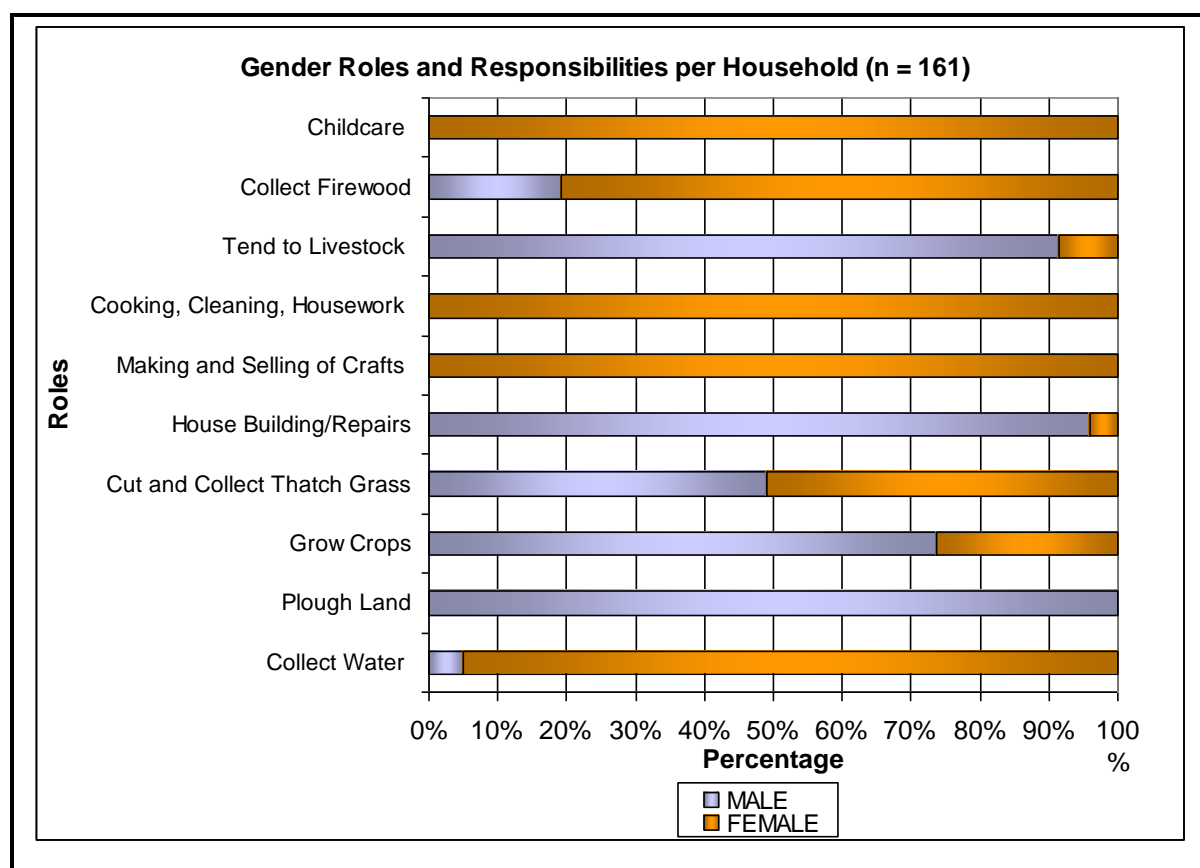
It was found through the livelihoods questionnaire survey that a large percentage of the community of Ingwenya (78%) identified themselves with a local church group. These church groups ranged in denominational type but are generally Shembe ⁽¹²⁾. Attending church was rated as the most popular social activity in the community (63%), with soccer and visiting family and friends a close second. Attending church was surprisingly not only a favourite activity for females but for males as well. Through observation, it is clear that these groups

(12) The Shembe religion is a combination of Zulu culture and Christianity that has been based on the old testament of the Bible. The Shembe religion is one of a number of rapidly growing syncretistic religions based on the belief that their leader is the messiah. Some of the Shembe beliefs include: worship of ancestral spirits, polygamy, and belief in Shembe miracles.

and associations play a large part in the community's social network and relationships of interdependence. Despite the value contributed to individuals sense of place and well-being, these networks play a part in the managing of households. According to the questionnaire survey, it was established that 20% of all households rely on friends or family outside of the household to assist with farming activities. This includes help during the planting and harvesting of crops and the tending of livestock. It was also noted that many households rely on family and friends also to provide childcare for working mothers and assist each other where parents are absent.

The limitation with the data collected, however, was that it does not provide a good indicator of group dynamics and the nature and quality of these relationships. Nevertheless it does indicate that the community of Ingwenya rely on one another quite significantly for support during times of need. This may, however, not necessarily be entirely positive as these memberships may entail obligations (for example to assist others in times of distress) as well as rights (to call upon assistance). These calls for assistance often come at difficult times and may often result in conflict.

Only 46% of households that undertake agricultural activities do so entirely unassisted, 20% rely on friends and extended family (outside of the household) and 34% pay others to assist either by labour exchange or financial payment. Thus households within Ingwenya are extremely interdependent on other individuals/members external and internal to the household for food production. In addition, the household survey clearly indicated that the various roles and responsibilities of each member of the household are very much gender-based (Figure 5.5). Females were generally confined to tasks associated with childcare and household work, whilst males undertake more physical labour. It was also found that the majority of those employed were males. These activities/responsibilities also play a significant role in social relations of the community. This was particularly evident in the observation of water collection by women in the community, where this time spent collecting water acts as an informal social forum where a variety of matters are discussed. Activities such as this are an important social attribute of a rural community which evidently acts as a means of social cohesion and interaction.

Figure 5.5 Gender Roles and Responsibilities per Household

Natural Capital

Natural capital is the term used for the natural resource stocks from which resource flows and services (for example, nutrient cycling and erosion protection) useful for livelihoods are derived. Natural capital, in a rural setting such as the community of Ingwenya, is very important as they derive all or part of their livelihoods from resource-based activities such as livestock farming, crop production, gathering of clay for crafts and thatch grass for housing. It is not only the existence of different types of natural assets that is important, but also access, quality and how various natural assets combine and vary over time (for example, seasonal variations in value) (DFID, 1999).

As indicated in *Chapter Three*, the community of Ingwenya is located in the Ubombo Mountains with steep topography and limited access to water. The location of the community, farming methods employed, lack of water and the general carrying capacity of the communal land means that although the natural capital is something on which the community is highly dependent, it is of less value to their livelihood than it should be, making the community

particularly vulnerable. Surprisingly, there did not appear to be any conflict over natural resources within the community of Ingwenya.

Subsistence agriculture makes up 79% of all food consumed in the community, with only 21% not growing crops at all. The dominant crops grown within the community may be seen in Figure 5.6. Crop production is highly seasonal with only 3% of crops grown all year round. As seen in Figure 5.7, the vast majority (64%) of crops are grown in the summer months, this is due to the region having a predominant summer rainfall.

Figure 5.6 Five Dominant Crops Grown by each Household that Practices Subsistence Agriculture

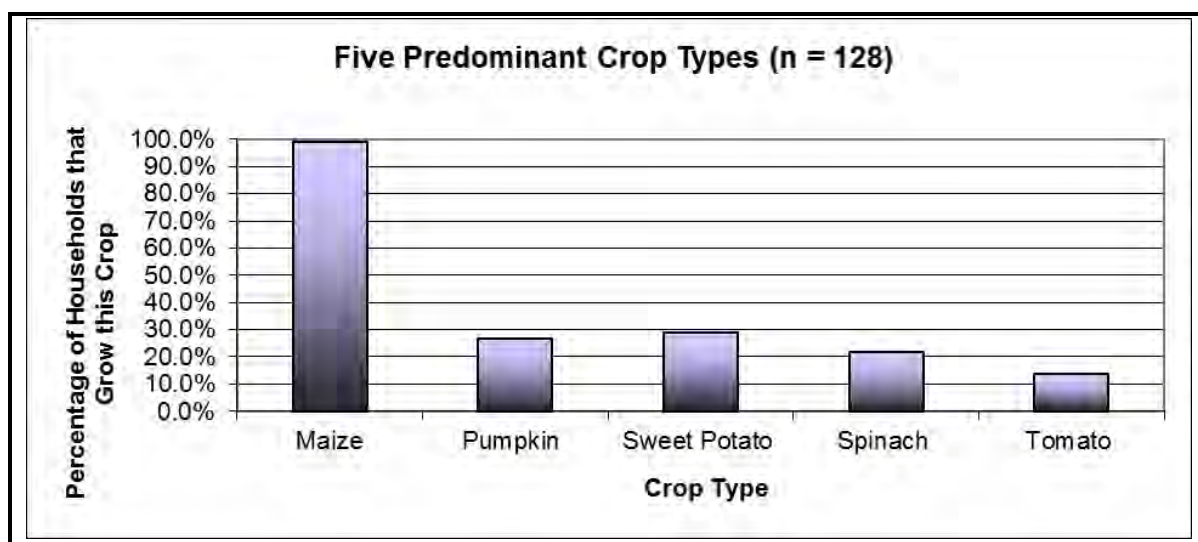
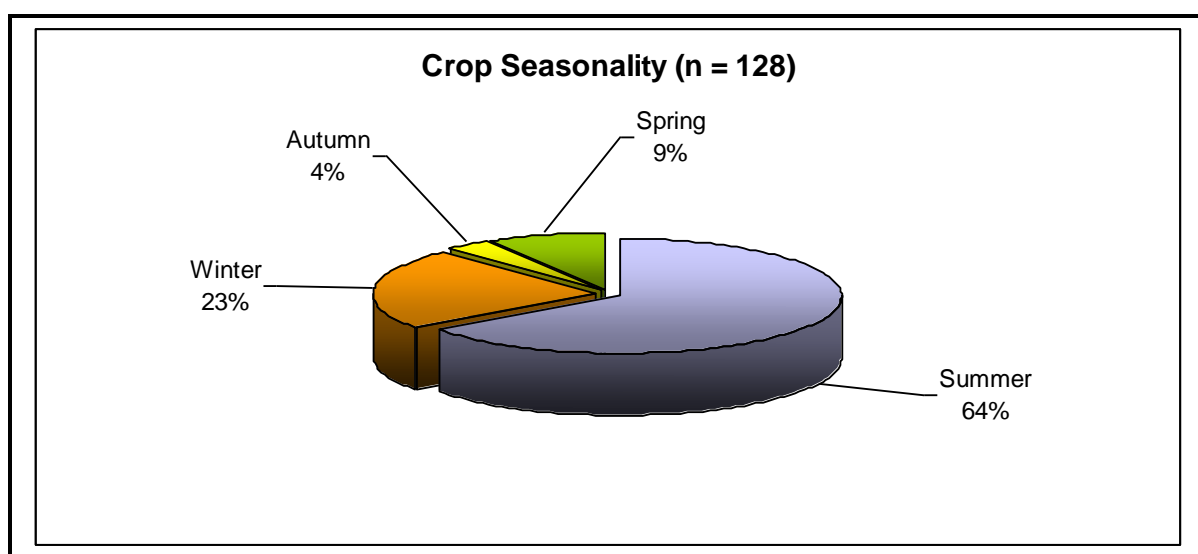


Figure 5.7 Household Seasonal Crop Production



The household survey also indicated that 85.4% of all the households within the community own livestock. As seen in Table 5.3, there are large stocks of both goats and cattle within the community

Table 5.3 Livestock Distribution per Household

	Goats	Donkeys	Chickens	Cattle
Percent of households that own livestock	64%	6.2%	50.9%	22.3%
Average number per household	7.2	0.2	4.9	2.1
Total Across the Community of Ingwenya	1,161	37	782	343

Observation of the subsistence agricultural activities undertaken in the community indicated that the crops produced are of relatively poor quality and are only undertaken on a small-scale at a household level. Some of the major difficulties faced by each household in the production of crops are that either their livestock or animals (including, monkeys, baboons, warthog/bush pig) from neighbouring reserves, particularly Mkuze Game Reserve, eat the crops that the community have planted. In addition, it was noticed that the fencing utilised to protect crops by each household, generally has holes and is often non-existent. This may be due to the cost of erecting sufficient fencing. The household survey also indicated that the community was particularly concerned and frustrated with the constant loss of both goats and chickens due to baboons and leopard from the neighbouring reserves. This evidently causes animosity between the community and the game reserves. The result of such tensions has been known to cause major conflict between game reserves and local communities (Lindsay, 1998; Neumann, 2000). This is an issue that may potentially cause conflict between the various PGRs and the community of Ingwenya. The UDT has identified the need for collective farming and has assisted the community to fence off an area in close proximity to the Msunduzi River where collective subsistence farming efforts seem to be making a significant difference.

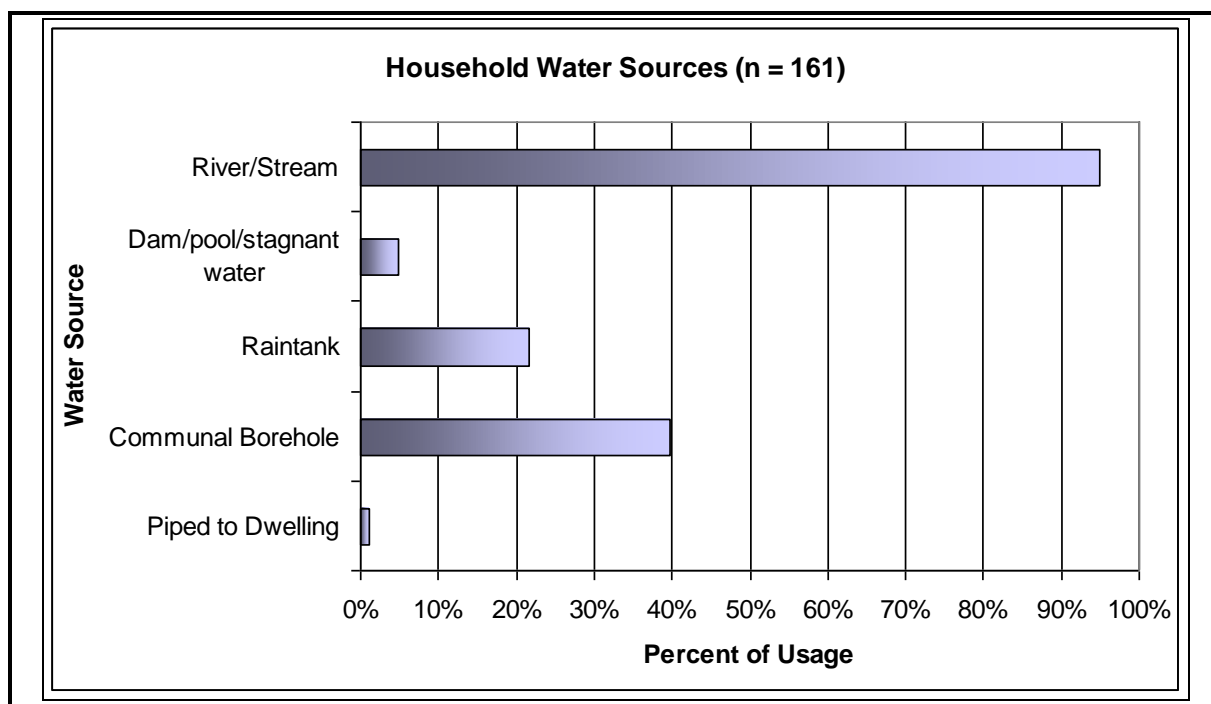
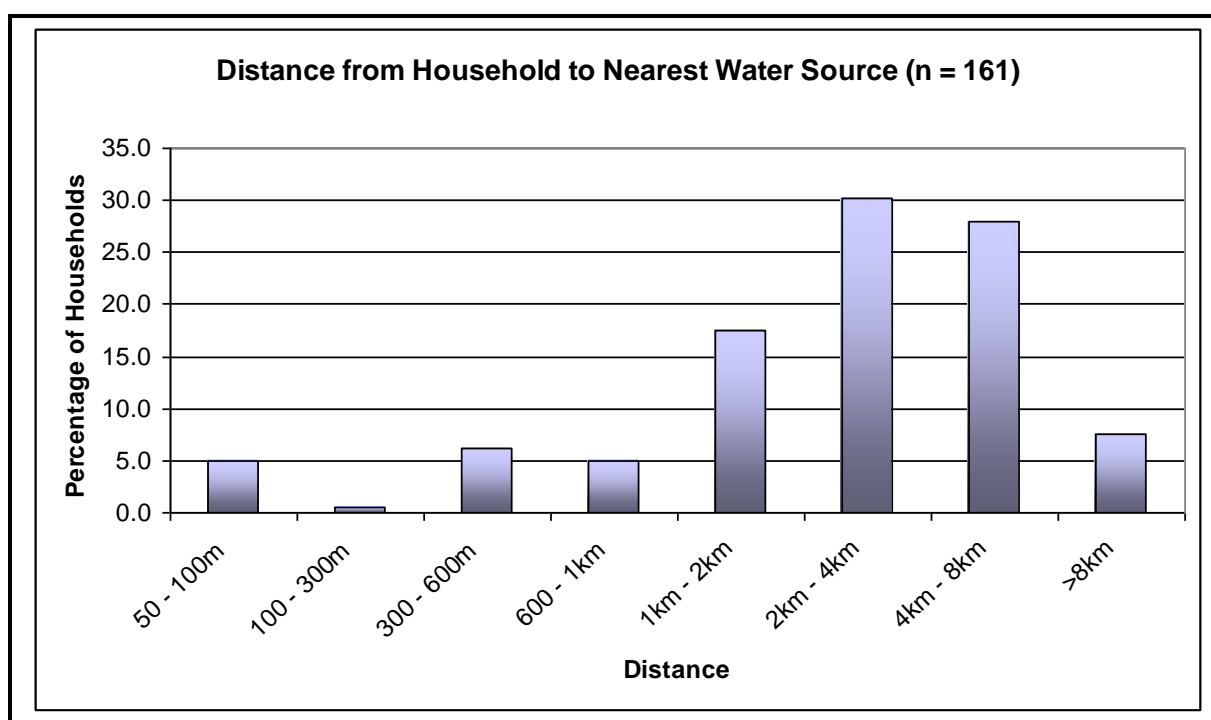
As seen in Plate 5.3, below, these agricultural activities have been largely successful. Although currently undertaken at a subsistence level, the intention of members of the community is to eventually sell excess produce to surrounding game reserve lodges. The problem with this, however, is the unreliability of the crops, lack of refrigerated storage and means by which to transport the produce to the various lodges.

Plate 5.3 Crops that have been planted by the Community of Ingwenya with the Help of the UDT



Water Availability

Water availability is a major problem within the community of Ingwenya. Due to its isolated location and disbursed settlement pattern, municipal service provision is extremely limited. As such, 95% of the community obtain their water from the Msunduzi River which is non-perennial (Figure 5.9). Community members often need to dig deep holes in the dry river bed in order to reach groundwater. There are also a number of communal boreholes within the community, however, these are spaced fairly far apart, which means community members need to walk great distances to obtain water. As indicated in Figure 5.9, these distances can be in excess of 8km. Although these two water sources are used throughout the year, the community uses the river more so in summer and relies on the communal boreholes in winter when the water table is lower.

Figure 5.8 Water Sources per Household**Figure 5.9 Distance from each Household to the Nearest Water Source**

The collection of water, although extremely time consuming, was found to be an extremely important social activity for woman. The time spent collecting water also acts as a forum where current community issues are informally discussed. Should water articulation be installed, this social activity should be taken cognisance of. Nevertheless, the absence of a

reliable and accessible source of water has a knock on effect on the community's health status, subsistence agricultural activities and ability to find employment or attend school due to the time spent collecting water.

Building Materials

Houses in the community are for the most part traditional. Each homestead tends to have a traditional structure and one more modern structure. The traditional structures rely on an adequate supply of materials which are sourced locally. These include thatch grass, trees and a mixture of cow dung and mud. The community of Ingwenya has been granted permission from Mkuze Game Reserve to collect thatch grass from within the reserve at certain times of the year.

Physical Capital

Physical capital comprises the basic infrastructure and producer goods needed to support livelihoods (DFID, 1999). These may include: affordable transport; secure shelter and buildings; adequate water supply and sanitation; clean, affordable energy; and access to information (communications).

Many participatory poverty assessments (Elis, 2003; Narayan *et al*, 2000) have found that a lack of particular types of infrastructure is considered to be a core dimension of poverty. "Without adequate physical capital, human health deteriorates and long periods are spent in non-productive activities" (Elis, 2003: 7). This was particularly apparent in the community of Ingwenya where large amounts of time are spent fetching water and firewood, travelling long distances for supplies and healthcare and seeking employment. The community has no electricity, utilising candles (99%) as their primary source of lighting and wood (94%) and gas (6%) as their primary sources of cooking. Access to clean and safe drinking water (as discussed above) is extremely poor and a great deal of time is spent fetching water. In addition, food that is not grown and basic supplies are purchased from a local shop (Mashibiza Spazza Shop), which is expensive, or from Mkuze which is located 27km north of the community.

It is particularly apparent in the community that the opportunity costs associated with poor infrastructure preclude education, the ability to sell produce or crafts, access health services and income generation. The community has a complete lack of affordable and adequate

transport essential to transport children to school and employees to work, limited childcare facilities to allow mothers to work, and in general extremely poor basic infrastructure, ultimately limiting their development. Although game reserves directly border the community of Ingwenya, the lack of transport infrastructure limits the opportunity to live in the community and work in these reserves. An example of this is the fact that the researcher took approximately 45 minutes to travel by motorbike from the centre of the community to Thanda PGR.

However, although the lack of particular infrastructure is a limitation, it was noticed that the community of Ingwenya, in comparison to the Fakude community which is located to the west of the community of Ingwenya and closer to the N2 Freeway, experiences less social pathologies. It was observed that the community closer to the freeway showed greater incidence of prostitution, shebeens ⁽¹³⁾ and petty crime. The isolation of the community of Ingwenya appears to have created a greater social cohesion. This could, however, could not be confirmed due to surveys not being undertaken within the Fakude Community.

One of the questions in the livelihoods survey was what the community thought the government did for them. The results indicated that the community in general does not believe the government does much for them. They did note however that the government does provide pension and child grants, schools and toilets. In addition, it was noted that food parcels have in the past been dropped off in the community. Unsurprisingly, this appears to co-inside with elections.

Financial Capital

Financial capital denotes the financial resources that people use to achieve their livelihood objectives (DFID, 1999). This may include available stocks (savings in the form of cash, bank deposits or liquid assets such as livestock and jewellery) and regular inflows of money (income, pensions, child grants or other transfers from the state).

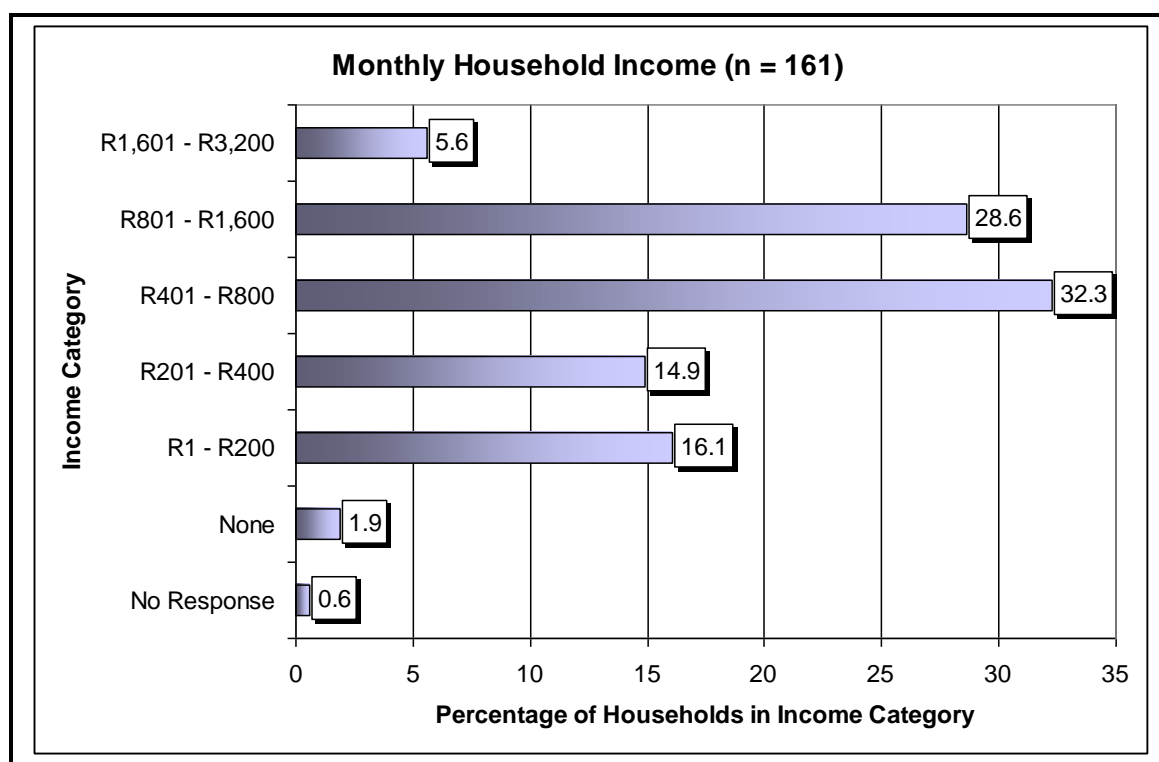
Household Income

As seen in Figure 5.10, 65% of households in the community of Ingwenya have a monthly income of less than R800.00 per month (as a collective - average of 8.5 persons per household) this means that on average, each person per household survives on less than R3.00

(13) an illicit bar where alcohol is sold without a licence

per day. In addition, it was revealed that 80.7% of this household income is generated from child grants and/or pension grants. Thus the community is highly dependent on the state for financial assistance. This directly correlates with the age structure and employment levels of the community as a whole. Although income levels for the community of Ingwenya are at large extremely low, the community does, however, have significant storable wealth and a certain amount of security in the form of livestock. As discussed in *Chapter Three*, the value of cattle in the Zulu culture is both one of productive value (in terms of the herds for milk and meat) and one of storable value (in terms of *lobola*, *sisa*, and cattle sales). The household survey undertaken as part of this research in 2007 indicated that the community had 343 head of cattle and 1,161 goats collectively. This equates to in the region of R3,087,000 in cattle stocks and R812,700 in goat stocks.⁽¹⁴⁾ The community of Ingwenya rely on these stocks for cash injections when and if required. An interview undertaken in 2011 indicated that the cattle stocks in the community of Ingwenya had grown to approximately 900 head, taken at the last cattle dip in the community (B. Manyanga *pers comms*, 2011). This sharp rise in cattle stocks may be directly attributed to the *cromelina oderata* alien invasive removal programme undertaken by the community with the assistance and guidance of the UDT. This community initiative, funded by the UDT involves contracts with local women in the community of Ingwenya to remove *cromelina oderata*, an alien invasive plant species that reduces the productivity of the land. This initiative is and has been successful in two respects, firstly it injects approximately R80,000 per month (N. Hawkey, *pers comm*, 2011) into the community through contracts with local women and secondly it has increased the livestock carrying capacity of the community of Ingwenya. These stocks are, however, governed by the availability of water in the region and are not a steady means of income but rather relied upon at various times of need.

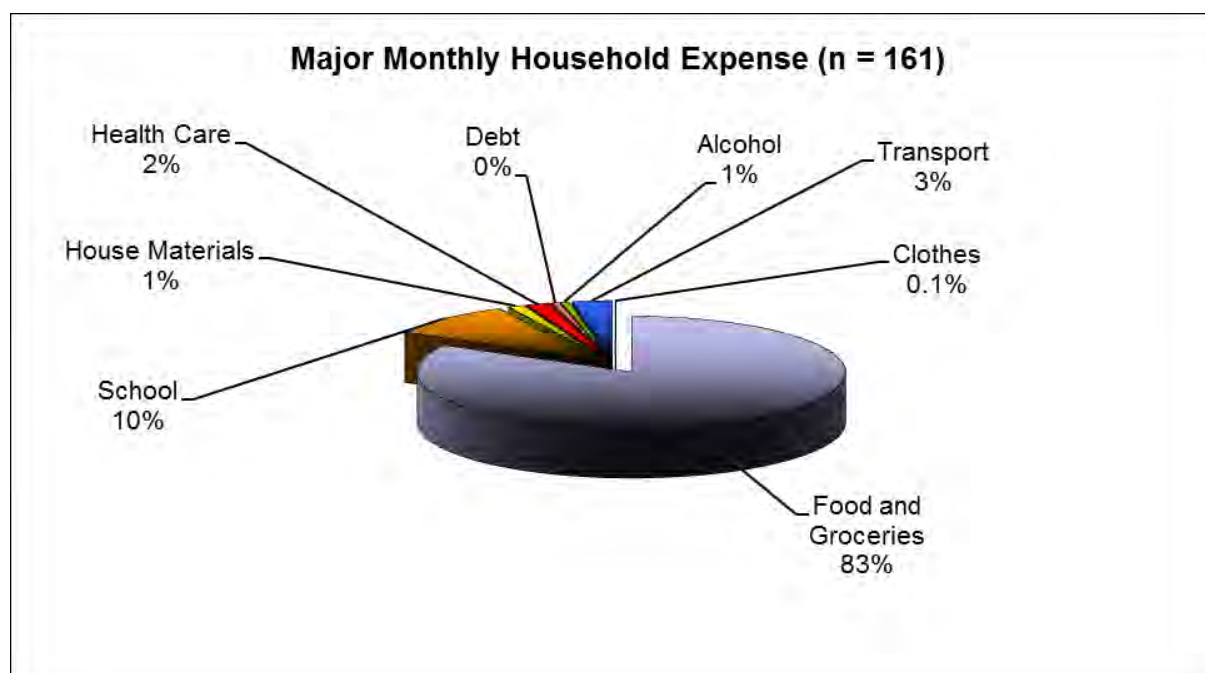
(14) These figures were calculated at R7,000 per head of cattle and R700 per goat. The average head of Nguni cattle was being sold for approximately R7,000 in 2007. This has increased significantly in 2011 where an Nguni can fetch in the region of R10,000 (cow) and R20,000 (bull) a head. (Nguni Cattle Breeders Society, 2011)

Figure 5.10 Monthly Household Income

Household Expenses

As indicated in Figure 5.11, the largest portion of household expenditure is on food and groceries, school fees and transport. This is despite the subsistence agriculture ventures undertaken in the community and the state subsidy for schooling. It should, however, be noted that the statistics depicted in Figure 5.11 are the perceptions of those interviewed. Observations and discussions with the UDT indicated that realistically a greater percentage of monthly household income is spent on transport and alcohol. Nevertheless, it is particularly evident that no surplus money is available for savings and the community lives to the most part hand to mouth, spending their money on immediate needs.

Figure 5.11 Major Monthly Expenses per Household



5.3.2 Current Livelihood Status of the Average Household in the Community of Ingwenya

Guided by the SLA, this section details the results of the questionnaire survey undertaken for 161 households across the community of Ingwenya.

Transforming Processes and Structures

Livelihoods and livelihood strategies adopted by rural communities, such as Ingwenya, take place within a context governed to a large degree by various structures and processes. These structures include organisations, both private and public, that set and implement policy and legislation, deliver services and perform a number of other functions that may affect livelihoods or have an influence on access to assets.

In the case of this research, these were found to be the Umkhanyakude, Jozini and Big Five False Bay Municipalities, role-players such as Ezemvelo-KZN Wildlife, private sector conservation and tourism establishments, and the UDT. These structures essentially oversee and implement a variety of overarching processes, initiatives, programmes and policies surrounding infrastructure, service delivery and land use planning (including conservation) in the region. This study assessed broadly the role of these structures in influencing the land use

change (if at all) and the function they currently play in assisting or hindering the ability of the community of Ingwenya to fulfil their livelihood objectives.

District and Local Municipalities

In terms of the Municipal Services Act of 2000 and the Local Government: Municipal Planning and Performance Management Regulations of 2001, the Umkhanyakude District Municipality is the overarching government institution in the region who is mandated to undertake land use planning, the implementation thereof and has the overall responsibility of overseeing service provision through local municipalities. The Municipal Systems Act obligates all municipalities to prepare an Integrated Development Plan (IDP) and Spatial Development Framework (SDF) as the primary and overriding management tools for their administrative region. As an integral component of the IDP, the SDF must also adhere to the requirements of the Local Government: Municipal Planning and Performance Management Regulations of 2001. A review of the Umkhanyakude District Municipality's IDP and SDF (2004 and 2009) indicated that little attention is placed on the municipality's relationship with private sector conservation and hence the land use shift. Although the Umkhanyakude District Municipality appears to support the tourism industry in the region, it does not appear to be a significant driver in the establishment of PGRs in the region. In the IDP and SDF, the Umkhanyakude District Municipality acknowledges that tourism in the region is growing rapidly and is developing as a major pillar of the District economy, nevertheless, the Umkhanyakude District Municipality feels that the contribution of this sector towards eradicating prevalent unemployment is still very minimal (Umkhanyakude District Municipality, 2009). The Umkhanyakude District Municipality does, however, recognise the contribution game reserves and the tourism sector is playing in terms of service delivery in the region, something the municipalities are failing at (Southern African Regional Poverty Network, 2011).

The current district and local government administration and means by which services are provided to the region and the community of Ingwenya is dysfunctional (Southern African Regional Poverty Network, 2011). This was confirmed by the results of the livelihoods survey which indicated that the livelihoods of the community of Ingwenya are for the most part rooted in the private sector (particularly PGRs and tourism establishments), which provide employment, a market for the sale of crafts, and support in terms of infrastructure development. The basic infrastructure and service delivery from the local municipalities is for the most part non-existent in the community of Ingwenya.

Ezemvelo-KZN Wildlife

Ezemvelo KZN Wildlife is a provincial parastatal agency mandated to carry out biodiversity conservation and associated activities in KZN. The primary focus of the organisation is biodiversity conservation, however, it oversees provincial nature conservation legislation and its associated regulations. The research undertaken for this study indicated that although Ezemvelo-KZN Wildlife has played an influential role in the shift from commercial agriculture to game farming in the study area and continues to do so across the region, with various initiatives and programmes such as the biodiversity stewardship programme, it was not the main driver. Instead, the private sector appears to be the largest driver and party responsible for this land use shift.

The contribution of Ezemvelo-KZN wildlife to the rural livelihoods is mostly through employment of local community members. The community programmes undertaken by Ezemvelo are discussed in *Section 5.4.2*.

Private Game Reserves

The results of this study indicated that the land use shift is being driven almost entirely by private sector investors. This is as a result of a snowball effect where land in the region is becoming more valuable as a tourism establishment than as an agricultural operation. This value does not always appear to be in monetary terms but as a particular lifestyle and status symbol for wealthy investors buying into these reserves. An example of this is the fact that the owner of Thanda PGR flew his entire graduation class from Sweden to Thanda to stay at his private luxury lodges on the reserve. Another example of this is the private lodge owners at Mziki, Zuka and Kube Yini PGRs, who own private lodges within these PGRs and visit only for holiday periods.

Despite the negative impacts of PGRs on rural communities, they appear to be playing the largest part in assisting rural communities with various aspects of their livelihoods, not only from the community outreach programmes, discussed further in *Section 5.4.2*, but also from the point of view that these tourism activities are diversifying the rural economy and assisting with the development of local communities.

Ubombo Development Trust

As mentioned in *Chapter 4*, the UDT is an organisation funded by a philanthropist who aims to uplift the community of Ingwenya through the provision of technical expertise, as well as supplies, equipment and financial resources to support groups or individuals with community-based development projects. Both the philanthropist and the director of the UDT own property within two separate game reserves bordering the community of Ingwenya. Recognising the needs of the community of Ingwenya, the UDT has for the last five years been undertaking rural development within this community. The vision of the UDT is one of sustainable rural development which they believe should occur at a rate that the community is comfortable with. The UDT, although it has a substantial budget, only provides a support structure for the community in development projects driven by the community. For example, the community has a major shortage of water and infrastructure to deliver water to their households. Despite the UDT having the budget to install water points throughout the community, rather, the UDT has sunk numerous boreholes, provided the materials, tools and expertise for the community to install water reservoirs, reticulation and water points themselves. With the oversight of the UDT, members of the community installed the system and as such learnt the skills and knowledge on how to install and repair the system, thus should the system need maintenance, the community is able to do so. By doing this the community has taken ownership of their own development, learnt skills and set in place infrastructure that is to their own benefit.

This vision and means of development is extremely slow as the community develop at their own pace, however, this means of development is far more sustainable given the isolated nature of the community. The UDT has made a significant contribution to the ability of the community to achieve their livelihood objectives and appears to be an overarching structure supporting and developing the community.

Vulnerability Context

As described in *Chapter Two*, the factors that make up the vulnerability context of a community are important because they have a direct impact upon people's asset status and the options that are open to them in pursuit of beneficial livelihood outcomes (DFID, 1999). The analysis undertaken for the vulnerability context of the community of Ingwenya, was not exhaustive, rather it tried to develop a broad understanding of the trends, shocks and aspects of seasonality that are of particular importance or could be affecting the livelihoods of the

community of Ingwenya. This was achieved through an understanding gained during the analysis of the community's livelihood assets, interviews undertaken and knowledge gained of the broader study area. Some of the main aspects found that may constrain households within the community of Ingwenya from achieving their livelihood objectives are listed in Table 5.4.

Table 5.4 Vulnerability Context of the Community of Ingwenya

Shocks	Trends	Seasonality
<ul style="list-style-type: none"> • Health Shocks (HIV/ AIDS) • Potential increased mortality rates 	<ul style="list-style-type: none"> • Land use change from conventional agriculture to PGRs • Reduced grazing potential within the community due to the carrying capacity of the area and increased number of residents • Population trends (in particular, age structure, migration to cities, birth rates and death rates) • Poor service delivery (particularly transport, health care, basic education and basic services) • Lack of infrastructure • Decline in infrastructure • Climate change • High reliance on state remittances 	<ul style="list-style-type: none"> • Drought (water insecurity) • Poor crop production/ food availability • Lack of employment opportunities • Livestock prices

Asset Endowments

Rural livelihood strategies depend on capital asset endowments on which to draw on in times of need. These endowments are essentially governed by the vulnerability context, however, are also a good indicator of vulnerability and the ability of a community to withstand negative shocks, trends and seasonality.

Table 5.5 outlines the asset endowments and their contribution to the average household in the community of Ingwenya. Positive and negative symbols are used to indicate the positive or negative contribution to household security of a particular endowment and the arrows represent the increasing/decreasing contribution of this endowment to household security. A similar procedure was adopted by Mtshali (2002) in order to ascertain indicators of vulnerability in rural Zululand.

Table 5.5 Asset Endowments Contribution to Household Security of the Average Household within the Community of Ingwenya

Asset Endowments	Positive/Negative	Increasing/ Decreasing	Rank
Human Capital			
Quality education	-	↑	1
Skills level	-	↓	1
Health	-	↓	2
Job opportunities	-	↑	1
Dependency ratio	-	↓	0
Score			1
Social Capital			
Family and kin support	+	↑	4
Inter-household networks	+	↑	4
Membership of social groups	+	↑	4
Score			4
Physical Capital			
Availability of clean water	-	↑	1
Sanitation	-	/	0
Transport	-	/	1
Electricity	-	/	0
Schools	-	↑	2
Health care	-	/	1
Score			1
Financial Capital			
Reliable Income (excluding state remittance)	-	↑	1
Savings	-	↑	1
Livestock	+	↑	4
Housing	+	/	3
Material assets	-	↑	1
Score			2
Natural Capital			
Access to land	+	↓	4
Productivity of land	+	↑	3
Reliance on subsistence agriculture as food source	+	↑	1
Score			3

Note: Plus (+) denotes positive contributor to security (Asset availability)

Minus (-) denotes negative contributor to security (Asset unavailability)

↑ Increasing contributor to security

↓ Declining contributor to security

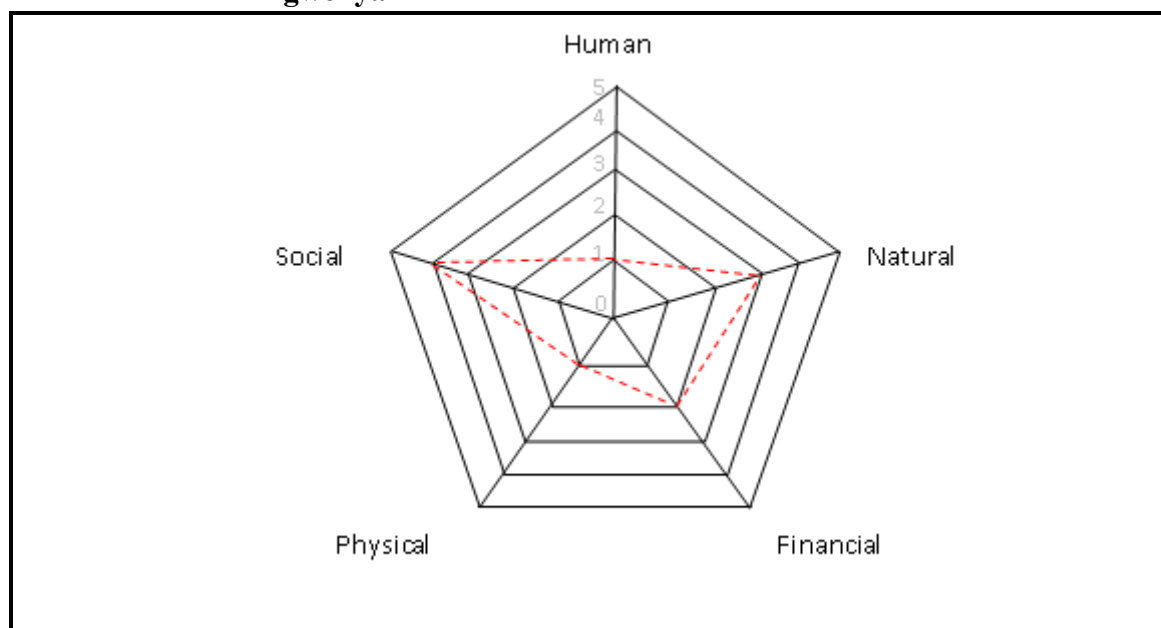
/ Neither declining or increasing contributor to security

Rank relates to the overall standard - (0) Deficient/very high; (1) Poor/high; (2) Fair/medium; (3) Adequate/medium to low; (4)

Good/low; (5) Excellent/very low

Based on the results of the livelihoods survey undertaken across the community of Ingwenya and the ranking scores allocated to the asset endowments set out above, Figure 5.12 further illustrates the shape of the SLA asset pentagon of the average household within the community of Ingwenya. The shape of the pentagon is intended to show schematically the variation in people's asset endowments.

Figure 5.12 Asset pentagon for the average household in the community of Ingwenya



Note: The red dotted line denotes the ranked allocations related to the standard of livelihood endowments

On the basis of the asset analysis, the community of Ingwenya has for the most part declining access to human capital. Although the quality of education within the community is certainly improving, the lack of skills, general ill health, a culture of apathy and the high dependency ratio is resulting in limited opportunities for the community to achieve positive livelihood outcomes, such as more income and reduced vulnerability (as seen in

Table 5.5 above). The community as a whole does, however, have good family and kin support structures which aid during times of need. This is in the form of inter-household networks and memberships in social organizations such as churches.

The physical capital in the community is extremely poor with limited to no physical infrastructure and service delivery by local municipalities such as electricity, sanitation, transport infrastructure and health care facilities. However, despite the poor infrastructure, the physical capital is increasing due to work being undertaken by the UDT and the various community outreach programmes of the PGRs in the area. Key elements such as education, water, and health care facilities are being developed with the help of these institutions.

Surprisingly the financial capital within the community is relatively good and is on the incline. This is due to a number of reasons including cash injections from the *cromelina oederata* alien invasive plant removal programmes being facilitated by the UDT, the increase in livestock numbers, continued government remittances and increasing employment at various game reserves. What should be noted is that these financial resources are not stable and can easily decline. The contracts from the UDT, although provide a cash injection will not last in the long-term, cattle stocks fluctuate and are dependent on market values and the support obtained from government through pension and child grants is creating a distinct culture of apathy.

As discussed above, the community is also well endowed with natural resources, which is certainly on the incline. The alien invasive plant removal programme is not only injecting money into the community of Ingwenya but it is making more land available for grazing and crop production and the subsistence agricultural undertakings of the community appears to be saving the community on the cost of food, transport costs to purchase food and are most likely improving the health of the community due to the varied crops now being planted. Some of the crops include pumpkin, spinach, sweet potato, tomatoes, cabbage, a variety of nuts, paw-paw and bananas.

Household Livelihood Strategies

The common livelihood strategy for the average household in the community of Ingwenya is for household members to undertake a range of activities which in some way contributes to one or more of the households needs. Due to the isolated nature of the community and the

lack of physical infrastructure and basic services, subsistence agriculture (livestock keeping and/or crop production) was found to be a core activity for virtually all of the households in the community. Coupled with this, the vast majority of the households within the community rely on in and out of community income and financial resources, as discussed above. This includes employment (permanent and temporary) at surrounding game reserves, alien invasive contracts and for the most part government remittances. The community also relies to a large extent on each other for support in times of need.

5.3.3 Rural Livelihoods under Agricultural versus Ecotourism Land Uses

The fact that the area has almost completely transformed, with little agricultural activity still remaining, made it difficult to gauge the way in which livelihoods may have changed under the different land uses. Most farmers and ex-farm workers have left the area, either immigrating or moving to other parts of the province and country. It was particularly clear that the community of Ingwenya did not have many ex-farm dwellers (such as community members that lived on agricultural farms in exchange for labour or wage). It seems rather that farm dwellers were removed off these farms during the 1960s (high apartheid), farms which are now a part of Mkuze. The study showed that the community does not have ex-farm workers who lost their jobs due to the more recent change to PGRs.

In order to try and ascertain the possible change or at least the community's perceived change in their livelihoods, qualitative interviews were undertaken with five ex-farm workers. The majority of those interviewed explained how difficult it was working on the agricultural farms. As one respondent (S. Malitha, *pers comm*, 2007) explained:

The time when we worked on the farm was a difficult one. We worked on the farm but lived in Ingwenya, my husband and I for 10 years. We earned little pay and the farmer treated us bad. They would try and trick us. We had to take ticks off the goats and if they spotted a tick they used to beat us. I remember one time they would take my husband, make him bend over and beat him. They hit my husband in-between the legs. If things would change, I would never go back to the farm...

Another respondent (M. Manyanga, *pers comm*, 2007) stated:

...the game reserves story is in our eyes good. The arrival of a game reserve bought us a change because if they didn't people from these areas, including the farmers and us, we wouldn't see any game as people were killing game non-stop. The white people fenced them off to protect them and employed the same people that were hunting the game to look after it. These game reserves give us jobs. Many more jobs than the farms. Also

the farmers didn't do much for the community, they didn't even come into our community.

All in all the results of this study have indicated that the impact of PGRs has had a greater positive impact on the community's livelihoods than agriculture. This is predominantly due to the greater employment opportunities and income earning potential (as discussed in *Section 1.2.4*) and the various community outreach programmes that are undertaken by the various reserves.

5.4 CURRENT COMMUNITY RELATIONS

This section provides conclusions gained from an integrative review of the results of the questionnaire surveys, in-depth interviews, PGR marketing material obtained and participant observation.

5.4.1 Geographic Marginalisation and the Hardening of Boundaries

When the study area was under commercial agriculture, the movement of local communities from area to area appears to have been relatively fluid with locals travelling across agricultural farms to reach neighbouring settlements, towns or areas with natural resources. With the establishment of all the game reserves in the region, game proof electrified fencing was erected in order to keep the game in and people out. In addition to the fencing, most of the reserves have dangerous wildlife and all of the reserves have APU which patrols the reserve. All of which ensure the community is kept out. As such, the formation of these reserves have created hardened boundaries which prevent local communities moving from one area directly to the next. As one of the ex-farm workers (P. Mngomazulu, *pers comm*, 2007) commented:

We can't get the clay for our pots as we used to...we now have to travel long distances to get around the reserves to visit our family and to get the materials we use for crafts and to build our houses, such as thatch grass and clay. Game reserves have brought a negative impact to us.

The game reserve manager surveys did, however, indicate that Phinda PGR and Mkuze do allow community members to enter the reserves in order to harvest thatch grass at certain times of the year.

Besides the limitation of movement of local community members, the hardened boundaries (as seen in Figure 3.2 and Figure 3.13), the isolated location and scattered settlement pattern of the community of Ingwenya have also caused limited physical accessibility for service delivery to this area. This has certainly contributed to the community having extremely low levels of physical capital such as water, sanitation, electricity, quality education and basic health care facilities.

The enclosing of the community by PGRs has created a smaller grazing and settlement area for the community of Ingwenya to expand. As mentioned by a community member (O Mtshali, *pers comm*, 2007):

When this area had cattle farms, we used to graze our cattle on the other side of the Msunduzi River (where Mkuze is now), but now we cannot send our cattle there because of the fences...The farmer that owned that land called Nkangala used to also steal our cattle.

Despite this, in 2011, the community of Ingwenya had in the region 900 head of cattle and the area does not have major evidence of overgrazing. This is most likely due to the *cromelina oederata* programme being run by the UDT and local community members, which is opening up further grasslands for the grazing of livestock. The other reason as to why the area has not been overgrazed is that the cattle numbers are limited due to the availability of water in the area. Should this water supply increase further, there is a possibility that the cattle numbers will increase to the point that the community will be overstocked.

5.4.2 Community Engagement

The presence of poor people in South Africa makes it morally unacceptable and particularly bad for business for game reserves not to show that they are engaging in some way with the issue of poverty and social responsibility. In this context, it is important for a game reserve to demonstrate that they are socially aware and that wildlife-based ventures are not contributing to the creation of poverty, but rather are doing the opposite – improving living conditions for the rural poor.

The idea of social responsibility is designed to show that private game reserves and upmarket wildlife-based developments are not simply intended to make money for landowners and developers, but that they also contribute to improving the lives of the poor. The results of this study indicated two main components of PGR community programmes, to which all of the

game reserves seem to subscribe. Firstly, all the reserves promise some form of job creation and secondly, they claim that they are involved in social upliftment and poverty alleviation as seen in Table 5.6. The information provided below was derived from the PGR manager in-depth interviews and documents provided by the PGRs.

Table 5.6 Summary of Community Initiatives of Each Game Reserve

Game Reserve	Initiative	Description - As provided by each Game Reserve
Thanda and Intibane PGR	Thanda Foundation	<p>The Thanda Foundation was established in order to focus attention on the socio-economic and developmental needs of the three neighbouring Tribal Authority Communities affected by Thanda. This foundation acts as a conduit for the raising of funds for such programmes and projects as well as for conservation research initiatives.</p> <p>Over the past three years, numerous projects within the community have been funded. These projects range from catering facilities at the Tribal Authority, children's creche equipment, computer installations at schools, sponsorships of a school choir to tour Sweden, sponsorship of a group of Zulu dancers to tour Sweden as well as the sponsorship of a youth soccer team to compete at the World Youth Soccer Games in Gothenburg in Sweden.</p>
	Jobs, AIDS and Conservation (JAC)	JAC is an initiative by Dan and Christin Olofsson and Thanda that promotes the establishment of entrepreneurial projects that create new jobs, seek to reduce the levels of HIV/AIDS infections through educational and medical programmes and community participation, as well as pursue ownership in game conservation and eco-tourism ventures.
	Bartlow Community Trust – Mduna Royal Reserve Conservation Project	<p>The second project embarked upon by the JAC Initiative is the community game reserve proposal known as the Bartlow Conservation Project or Mduna Royal Reserve. Adjacent to Thanda lies some 7500ha of land which was previously the Nguni testing and breeding station, operated by the Department of Agriculture and Cedara Training College. Thanda has actively supported the Wildlands Conservation Trust, the Department of Agriculture, GTZ (German Development Agency) as well as the Ingonyama Trust Board and his Majesty King Goodwill kaBhekhuzulu in order to use this prime bushveld currently being used as a small-scale Nguni farming operation. The objective behind this collaboration is to develop a community game reserve to be used for game ranching which will also be an ecotourism destination. This potentially "blue chip" project offers the best opportunity to embrace the principles of CBNRM as a partnership between private enterprise (Thanda), Government (Department of Agriculture), communities (Mdletshe and Zulu) as well as the Ingonyama Trust Board and His Majesty, King Goodwill kaBhekuzulu, national government organisations such as The Wildlands Conservation Trust and the GTZ.</p> <p>Thanda has also undertaken either to raise funds for the purchase of game or to provide a soft loan to the community for such investment. The spin-offs are unique as Thanda will manage the wildlife, security, anti-poaching and operational reserve requirements in return for exclusive traversing rights for guests. An annual lease fee is also payable to the community through the agreement with the Ingonyama Trust Board. The idea is to also to create smaller Black Economic Empowerment business opportunities to tender services for the project.</p> <p>The idea of creating larger tracts of wilderness land to reintroduce herds of wildlife, coupled with the aspirations of the local people to become more involved in mainstream ecotourism as well as game ranching, forms the driving force behind this project.</p>
	Star for Life, AIDS-Free, That's Me Programme	The Star for Life project was one of the first projects implemented by the JAC initiative and is an awareness and prevention programme that was started as a pilot project at the Siphosabadletshe High School which is near

		<p>Hluhluwe in Zululand. This program ran from July to November 2005. After an assessment was concluded at the end of 2005, funding was raised to expand the project to 40 schools in the uMkhanyakude District at a cost of R32 million. The Provincial Government of KwaZulu-Natal, through the Health Department, has committed R16.5-million over 3 years, to be rolled out from 2007 to 2010. The project reaches over 40,000 children with its message of “AIDS-free, that’s me” using the techniques of mental vaccination to help learners make informed choices about sexuality.</p> <p>The project currently employs 22 staff, who are highly qualified and skilled coaches or councillors and trainers. The project’s head office operates out of the Thanda Foundation offices. The key objectives of this project are:</p> <ul style="list-style-type: none"> • to use mental vaccination in order to live an AIDS-free life • to increase the knowledge about HIV/AIDS • reduce the numbers of HIV – positive and pregnant students • to change the students’ values and attitudes in a perceptual way
Kube-Yini PGR	General Community Outreach	<p>Due to Kube Yini being a small private game reserve, owned and financed by shareholders, it does not have formal community outreach programmes or social responsibility initiatives. Kube Yini does, however, employ 90% of its staff from the neighbouring community. In addition, Kube Yini supplies clean water to the community of Ingwenya and assists the community of Ingwenya where possible; such as helping to fix borehole pumps, supplying books, stationery, toys etc. to schools and crèches.</p>
Phinda PGR	Africa Foundation	<p>Phinda, which is a part of &Beyond (formerly Conservation Corporation Africa) has a number of community initiatives, which are predominantly funded and facilitated through the Africa Foundation which runs the social responsibility element of &Beyond’s 35 luxury lodges in 5 countries. The philosophy behind the Africa Foundation is that communities are most effectively helped only if they are empowered to help themselves. Thus the foundation focuses its various initiatives on three categories. These include:</p> <p>1) Education</p> <ul style="list-style-type: none"> ○ School support, including <ul style="list-style-type: none"> - construction of classrooms - provision of equipment - construction of ablution blocks - construction of crèches - administration rooms - media centres - fencing - and the development of vegetable gardens - career guidance - conservation education <p>The Foundation has constructed over 90 classrooms and 3 libraries in the region.</p> <ul style="list-style-type: none"> ○ Scholarships <ul style="list-style-type: none"> - Leaders Education Fund (CLEF) developed in 1995 offers partial funding to students from rural communities bordering conservation areas where the & Beyond Foundation operates. <p>To date, the CLEF programme has sponsored over 230 students, and total funding granted to over R2.7 million.</p> <p>2) Healthcare and water provision</p> <ul style="list-style-type: none"> ○ Health Support, including <ul style="list-style-type: none"> - building and equipping of clinics - supporting health care operations - running HIV/AIDs awareness programmes and health counselling. ○ Water provision, including

		<ul style="list-style-type: none"> - Providing guttering and rainwater tanks, taps, water pumps and windmills. <p>The Foundation has built and equipped the 24-hour Mduku Clinic which serves over 11,000 people in the region. The foundation has also assisted in a number of other facilities in the region.</p> <p>3) <i>Income generating activities</i></p> <ul style="list-style-type: none"> ○ Development centre, which includes: <ul style="list-style-type: none"> - computers with internet - basic computer training lessons. ○ Skills Training, which includes: <ul style="list-style-type: none"> - Training in skills such as plumbing, carpentry, electrical knowledge, brick-laying, tiling, plastering and emerging contractor training. ○ Agricultural initiatives, including: <ul style="list-style-type: none"> - provision of water and assistance with vegetable gardens
Mkuze Game Reserve (State owned)	Conservation Projects	Mkuze undertakes a large invasive alien plant species programme where local communities benefit through contracts to clear these species. To ensure that there is enough benefit through this programme the employment is split between females, youth and disabled community members. Funding for the clearing operations mostly comes from the Department of Agriculture, Environmental Affairs and Rural Development's Invasive Alien Species Programme.
	Community Levy Fund Programme	Established in 1998 with the overall aim of strengthening community participation in Ezemvelo KZN Wildlife programmes as well as adding value to the communities living adjacent to the protected areas by giving them benefit directly from tourism activities. A portion of tourist spending goes to a community levy which is collected to fund community driven initiatives. Over the years this fund has grown and funded a number of community initiatives which range from building additional classrooms at needy schools, to the establishment of crèches, construction of community halls, economic generation initiatives on behalf of the communities.

Despite the large amount of money being invested into the area with the establishment and operation of these PGRs, the rural communities neighbouring these reserves remain in poverty. There is no doubt that some of the reserves selected in this study really do make a significant positive impact (as indicated in Table 5.6 and discussed above) and that many reserves engage in these initiatives with great sincerity and put significant resources into developing rural communities and building relationships with their neighbours. The problem with most of these initiatives is, however, the fact that they are isolated and misguided with little understanding of the reality of the communities on the ground and what development means. Thanda is a prime case and point.

An example of this is Thanda's JAC Initiative. Part of this initiative is to promote conservation and educate local communities on biodiversity and CBNRM. This is supposed to be happening through a large community game reserve project that is part of the JAC

Initiative. The idea is that an area adjacent to Thanda PGR, on the Igabadela community side, be developed as a community game reserve to be used for game ranching which will also be an ecotourism destination. “The idea of creating larger tracts of wilderness land to reintroduce herds of wildlife, coupled with the aspirations of the local people to become more involved in mainstream ecotourism as well as game ranching, forms the driving force behind this project” (Thanda, 2009). This initiative assumes that the community in which they propose partnership has the same value and want for a game reserve. Observations made during this research illustrate just how misguided this initiative in fact is.

Whilst the researcher was in the Igabadela community, two rhinos broke through the fence of Thanda PGR into the community. The response from the community was one of complete hostility towards the rhinos and Thanda’s APU who were trying to capture and release the rhinos back into the reserve. In conversations with the community and the APU subsequent to this event, it was evident that the community had a negative view of both the animals and Thanda reserve with their strong arm tactics of anti-poaching and relationship with the neighbouring community. It was particularly interesting that Thanda views the Igabadela community as a soon to be partner in an expansion, when the community in fact wanted to spear the rhinos when they came into their tribal area.

Another example of this was seen with the multi-million rand investment into a soccer field within the confines of Thanda PGR. The intention behind this field was for the reserve to host international players, in particular for the 2010 Soccer World Cup. In addition to this investment was the installation of a reverse osmosis desalination plant to purify the saline groundwater in the area in order to water the grass for this field. In order to utilise this field for the benefit of the community, Thanda involved the local community in an inter-community soccer day with the winner receiving an all expenses trip to Sweden to play a soccer tournament. This just illustrates the good intention, but misguided investments onto community development. The Thanda soccer field in relation to a soccer field within the community may be seen in Plate 5.4. The point here is not that the soccer field in Thanda PGR is better but that money spent is misguided. If even a portion of money that was spent on the Thanda soccer field was spent constructively in the community (on water, basic infrastructure or community development), a far greater difference could have been made.

Plate 5.4 The Soccer Field at Thanda PGR and the Soccer Field within the Community of Ingwenya



The survey results across the community of Ingwenya indicated that the PGRs do play a part in the livelihoods of the community and that the shift to game reserves is doing more for the area and the community than agriculture did. The community members' perceptions of the various PGRs seem to differ from one reserve to the next. Many of those interviewed feel that PGRs are positive, whilst others feel that they are negative. These views also don't seem to be constant. An example of this is the fact that members of the community have negative views of a reserve based on its management at the time.

The community had a „land claim list“ which depends on what the reserve does for the community. If they do good things and treat their workers well, they are not on the list. If they treat them bad, they are on the list (anonymous, *pers comm*, 2008).

The community initiatives undertaken thus serve two main functions. Firstly, they are a marketing necessity which most international guests not only like to see but almost demand. This is particularly evident on the websites of almost all the PGRs, where there is a page on social responsibility. These pages provide details of all the initiatives that are undertaken by the PGR and how the guests can make a difference. Secondly, initiatives satisfy the neighbours so they don't poach or cause any trouble. In many cases the initiatives undertaken include the installation of infrastructure or technologies such as computers etc. As was observed whilst undertaking this research, these events are generally highly publicised and there is a large unveiling ceremony. The problem with these initiatives is that they are not always sustainable and don't make a long-term impact on the livelihoods of the community. This type of development also seems to be fostering a culture of apathy within the community.

Despite all the community programmes that are run by each reserve, there are a number of impacts that still remain. These include the following:

- The fact that leopards kill the community's livestock and baboons eat their crops;
- the strong arm tactics of many of the APUs in the surrounding game reserves;
- the fact that large areas are now blocked off to the community due to game fencing, not allowing them access to shorter travel routes and natural resources that they previously could access; and
- the culture of apathy that community outreach often instil.

6 CHAPTER SIX – CONCLUSION AND RECOMMENDATIONS

6.1 INTRODUCTION

This research has focussed on investigating the impacts of privatised forms of nature production on rural community's livelihoods in northern Zululand. Research was conducted on the relationship between the tribal community of Ingwenya and five surrounding game reserves. This research engaged with the community of Ingwenya to explore the livelihood implications for local community members. The SLA was utilised as a conceptual framework to both guide and analyse the data collected. This chapter concludes by addressing two main aspects. First, it concludes the study by summarising the main findings of the research, as guided by the research questions set out in *Chapter One*. Second, it makes recommendations based on the results obtained and experience gained by the researcher during this study.

6.2 CONCLUSIONS - KEY FINDINGS IN RELATION TO THE OBJECTIVES OF THE STUDY

6.2.1 Historical and Current Processes of Agrarian Change - Nature Production in Northern KwaZulu-Natal

Question 1: How has land use in the Zululand region shifted over the past twenty years?

As was highlighted in *Chapter Three*, the history of Zululand is a complex one, not only due to the struggle between different groups for land and power but one of conflict between nature and society to exist in this unsympathetic landscape. The various agricultural undertakings in the study area proved that it was not particularly suited for crop production, including sugar, cotton or sisal. In addition, the presence of game and the *Nagana* outbreak in the region devastated the farming of cattle in the area. Inadequate rainfall, agricultural crop and market failures, employment conditions, malaria, and in particular *Nagana* seem to have played a role in the desirability of converting from conventional forms of agriculture to game farming.

This study has shown that the difficulties associated with cattle farming in the region, coupled with the increased popularity of the state reserves in Zululand (including Mkuze) as tourism destinations, saw a rise in the interest in creating PGRs. Slowly, marginal cattle farms were sold off, rehabilitated and converted to PGRs. The formation of these PGRs initially saw two predominant types of establishments, either hunting operations, with fairly rustic accommodation or luxury lodges catering for the growing wildlife tourism industry in KZN.

As discussed in *Chapter 5*, interestingly, these establishments were found to be owned, not by farmers who had converted their farms from traditional agriculture to game but predominantly by wealthy individuals or groups buying into the area. Although it was found that there are still a few operational agricultural farms in the area, the land use has shifted significantly over to game farming. This shift has also required a shift in mind-sets and the way nature is viewed. As indicated in *Chapters 3 and 5*, the view of the landscape has also changed significantly with game initially viewed as a hindrance and in the last two decades, progressively as an asset to the area. The efforts of conservationists and drive to protect certain areas in Zululand and the increasing interest in these wildlife spaces by investors has seen a large modification in the physical landscape with the development of private reserves.

A major factor as to why the Northern Zululand region has become such a popular location for the establishment of PGRs, rather than other areas, is the fact that despite the various historical agricultural undertakings in the area, the area still contained certain vegetation types which are particularly suited to game. This ranges from dry sand forests, forests, woodlands to open grasslands and savannah (Govender, 2011). These vegetation types allow for the big five species as well as species typical of the African bush, such as giraffe and hippo, which fit into the wilderness paradigm of tourists.

Question 2: How is nature being produced and for what reason?

This large shift in land use has seen the area take on new cultural meanings and representations. The game reserves selected in this study all indicated some form of physical and discursive manipulation in order to meet the perceived expectations of tourists. As has been discussed in *Chapter 5*, all the game reserves were seen to have a front stage presentation of nature, pristine wilderness and primitive cultures (for example, Vula Zulu), constructed specifically for tourists, whilst there remains a variety of backstage proceedings and hidden history of land use (for example, the fact that these spaces were under intensive agriculture in many cases less than a decade ago).

It appears that the major reason behind this production of nature is that these spaces must succeed in the marketplace. Private wildlife production bets on international and relatively rich nature tourists coming to enjoy an unforgettable wilderness experience. As a result, these spaces are largely shaped by the (perceived) demands of the market.

There appears to be an idea that foreign tourists prefer to visit “pristine” wilderness areas, devoid of human habitation (except those of primitive indigenous cultures). This was particularly apparent in the marketing and wilderness experience offered by the various reserves selected in this study. These reserves are marketed and presented to tourists as being “untainted” landscapes, populated only by wildlife. The various histories of these landscapes are almost kept confidential. The history of colonial exploration and Zulu culture is presented rather than the history of agriculture, *Nagana* programmes and the more inconvenient history of forced removals during apartheid. These histories don’t go well with the presentation of the area as wilderness suspended in time.

Question 3: Why is this trend so dominant in this region?

The shift to wildlife-based forms of land use appears to be dominant in the study area due to a number of reasons. Firstly, the history of the various agricultural undertakings in the region has played a major role in the desirability of this shift. The study area appears to have not been particularly suited for livestock or crop production, thus opening up the area for a change in land use, with farmers wanting to sell marginal and unproductive land. Secondly, the fact that the Northern Zululand region, despite the historical agricultural undertakings in the area, still contained certain vegetation types which are particularly suited to game and the creation of a wilderness space. Lastly, this trend seems to have dominated in this region through a snowball effect. The existence of state reserves and the more recent emergence of Phinda PGR in 1990, seem to have created a certain perception and interest in the area. Evidently, this initial trend sparked off an attractiveness of the area to individuals and investors, snowballing into what is today a large nature/wildlife tourism area. The research indicated that this trend was driven predominantly by private sector investment rather than any particular government departments or conservation bodies. Although KZN Tourism and KZN Ezemvelo wildlife clearly play a role in the promotion of wilderness spaces, the conversion to PGRs is driven almost entirely by the private sector.

The problem, however, with PGRs is that they are profit driven and can cost an exceptionally large amount of money to establish and maintain, and if demand for wildlife lessens, the possibility of another large land use shift is possible. It was particularly evident in the game reserve manager interviews undertaken in this study that ecotourism is not as lucrative as it may appear. As an example, one of the PGRs spent close to R300,000,000 on establishing the reserve and it has been clear that the return on investment is generally poor. This means that

private nature conservation is unstable and does not always guarantee profit. Although income potential is good, the costs of establishing and maintaining reserves are high. As discussed above, the majority of reserve owners are wealthy investors looking to buy their piece of the African bush, rather than to make large amounts of profit.

6.2.2 The Impact of the Current Privatisation and Production of Nature on the Socio-Economic Position of Ex-Farm Dwellers and Rural Communities, in Particular that of Ingwenya

Question 4: What is the current livelihood status of the average household in the community of Ingwenya?

As stated in *Chapter 2*, Chambers and Conway (1991) deem a household livelihood sustainable when it can cope with and recover from stresses and shocks and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resource base. The question arises, is this the case for the average household in the community of Ingwenya? There is no doubt from the results of this study that the average household in the community of Ingwenya lives in poverty. The average household in the community is particularly vulnerable to shocks, such as HIV and AIDs, trends such as poor service deliver and seasonality, in particular drought. They are extremely dependant on state remittances, support from the UDT and surrounding game reserves and have developed a certain culture of apathy.

The community to the most part has declining access to human capital but has increasing access to physical, natural, social and financial capital. The average household in the community survives through the combination of a variety of livelihood strategies. These include the use of a variety of support structures and contributions from internal and external household members, growing most of their own food and drawing on pension and child grants from the state. Given the results of this research, the livelihoods of the average household of Ingwenya may not be considered sustainable.

Question 5: What does the shift from commercial agriculture to wildlife-based forms of land use mean for rural livelihood strategies?

The study clearly shows that tourism has certainly diversified the rural economy, however, it is not clear that the local communities, in particular Ingwenya benefit fully from the land use

change from agriculture to game. There does not appear to be a major negative impact due to the land use shift, however, there doesn't seem to be a major positive impact either.

One area where the community of Ingwenya is clearly benefiting is that of assistance with physical capital. Although the community outreach initiatives of the various reserves are often misguided and don't make the full impact that they are intended or could, they are without a doubt contributing positively to the livelihoods of the community of Ingwenya, something that would otherwise not be happening without these reserves. In addition, the UDT is making significant contributions to the livelihoods of the community through its assistance with various programmes and projects, again, something that wouldn't have taken place if it were not for game reserves.

Question 6: How have local livelihoods as well as perceptions of the privately-owned farms changed with the conversion from commercial agriculture to wildlife forms of land use?

Although a good understanding of current livelihoods was obtained as part of this study, a comparison between the community's livelihoods under commercial agricultural versus wildlife-based forms of land use could not be achieved. This research did, however, indicate that the community has in many respects a negative sense towards agricultural and wildlife-based forms of land use. Each with their varying negative aspects. However, it was relatively clear that the community members interviewed, for the most part favour wildlife tourism as they believe it has done more for the community than agriculture. It appears that coupled with the low wages earned on agricultural farms, farmers treated their workers and in some instances, the community, poorly. With the emergence of PGRs and their social responsibility community initiatives, the community has seen far more benefit from this form of land use.

Question 7: How (if at all) are the game reserves inserted into the livelihood strategies of the community of Ingwenya and how different is this from historical labour relations that the community of Ingwenya may have had with neighbouring agricultural farms?

The game reserves are most certainly inserted into the livelihood strategies of the community of Ingwenya. In terms of employment provision, 89 individuals from the community of Ingwenya are employed by a surrounding PGR, equating to 19% of those employed (both skilled and unskilled) across the community. Despite providing more job opportunities, the income potential of wildlife tourism is far greater than agriculture. In addition, the various community initiatives of the PGRs have made a direct difference to the livelihoods of the

community. An example of this being the construction by Phinda PGR of new classrooms at the Mtolomba High School. From interviews undertaken with ex-farm workers, although there are numerous negative impacts of PGRs, as a whole the PGRs do more for the area than agriculture did.

6.2.3 Current Relationships between the Community of Ingwenya and the Five Contiguous Game Reserves

Question 8: How has the conversion to private game farming altered the geographic context and local mobilities of the community of Ingwenya? Are PGRs hardening the boundaries (for example, through the construction of game-proof fencing)?

In the case of the community of Ingwenya, geographic marginalisation is particularly evident, as may be seen in Figure 3.2, in *Chapter 3*, with conservation taking up over 28% of land use in the region and most certainly hardening the boundaries and flow of movement for local communities. This fact is increasingly apparent with the mushrooming of PGRs in the region in the last decade. Whether this is a negative or positive by-product is debatable. The isolation and remote location of the community of Ingwenya and many other communities in the region plays a significant part in the lack of physical infrastructure and service delivery into these areas. The community's isolated nature limits the ability of the municipality to deliver basic services such as electricity, health care, water and sanitation, quality education and health care facilities. In addition, as the community is increasingly being boxed in by game reserves is resulting in limited areas for expansion. A problem that has been mitigated through the UDT's alien invasive programme, creating a greater carrying capacity of the existing land, but nevertheless a problem that may be compounded in the future as the community expands.

On the other hand, the community's isolation may be considered as an advantage. It was particularly evident in this study that the community of Ingwenya experiences far less social pathologies and an increased social cohesion between community members, as compared to the Fakhude Community located within closer proximity to the N2 and the town of Mkuze.

Question 9: Does the community see a difference between private and state-owned reserves in terms of the nature of the relationship?

In general, the community does not see a difference between state and privately owned game reserves. The perceptions of the community, of the various reserves, appears rather to be

based on relationships with individuals within the reserves. An example of this is the “land claim list” that the community kept, deciding on whether a reserve should be under claim based on the reserves initiatives and outreach programmes. Another example is that of the rhino breaking out into the community of Igabadela and how they did not see a problem with killing the rhino from a PGR. This is the same community Thanda claims to be developing a partnership for CBNRM and a shared vision for conservation.

Question 10: What forms of engagement have emerged between local people living at Ingwenya and the management of the five different reserves?

All of the game reserves assessed as part of this study have some form of community outreach programme in order to conform to the expectations of post-apartheid South African society and the tourists visiting their reserves. The result, however, is an uncomfortable fit between an essentially capitalist venture in wilderness/ecotourism and the developmental rhetoric of job creation, partnership, and even CBNRM as Thanda PGR claims to instil. Despite the reality in the neighbouring community of Ingwenya, as one has seen in the results of this survey, the tourists visiting these reserves are rather shown the Vula Zulu experience of traditional and authentic Zulu culture instead of the poverty and awkward reality of everyday life in the communities directly neighbouring these reserves. Tourists are rather kept within the reserve in what is portrayed as a primordial landscape, protected and almost lost in time.

6.3 RECOMMENDATIONS

While PGRs appear to be thriving in the study area, particularly over the past 10 years, high levels of poverty remain and may be enhanced by the current patterns of economic development. Maximising livelihood benefits of a rural community surrounded by PGRs, such as Ingwenya, requires a good understanding of what people most need and want (their livelihood priorities) and of the complex ways in which wildlife tourism affects their livelihoods (direct and indirect livelihood impacts). Rural communities in this context need to take ownership of their own development goals, the way they develop and the rate at which they are willing to change. As has been seen in this research, the approach taken by the UDT is far more sustainable than that of the various PGRs. Local needs are to be kept in mind and mind-sets shifted, both from the community’s side and from that of the PGRs. Based on the results of this study, the following is recommended:

- The UDT conduct a household livelihood survey across the community of Ingwenya every second year in order to ascertain the key issues and constraints to the livelihood strategies of the community and areas of intervention.
- All PGRs in the northern Zululand area develop a Zululand PGR Association, with the aim of:
 - Identifying and addressing threats to Conservation,
 - Identifying and developing joint programmes to enhance social sustainability and community involvement and development within the area;
 - Holding all game reserves accountable in terms of a code of ethics for all members. This code of ethics should relate to conservation (for example, management of wildlife in the area) to people (for example, interactions with tourists, employees, local communities, government agencies, and fellow members);
 - Developing cooperative environmental management strategies and plans for the region;
 - Educating tourists on the management required for conservation;
 - Developing tourism operations within the rural communities (for example, include a package where guests may spend one night in a luxury lodge and one night within a true Zululand rural community's *imizi*); and
 - Including a seat in the association for community involvement and to allow a platform for open communication between the reserves and the community.

I feel that this association would go a long way in strengthening PGRs' long-term credibility and reputation with tourists, local communities and government. It would set a standard for conservation in the region and would allow for better channelling of investment and development opportunities in the Zululand region.

7 REFERENCES

- AFRA. (2004) *Investigation of the Effects of Conservation and Tourism on Land Tenure and Ownership Patterns in Kwazulu-Natal*, Association for Rural Advancement, Phase 1 Report, 15 September, Pietermaritzburg: McIntosh Xaba & Associates.
- Allen, G. and Brennan, F. (2004) *Tourism in the New South Africa, Social Responsibility and the Tourist Experience*, I.B. Tauris, London and New York.
- Allison, E.H. and Horemans, B. (2006) *Putting the principles of the Sustainable Livelihoods Approach into fisheries and practice*, Marine Policy, Vol 30 (6), 747-756.
- Anderson, K. (1995) *Culture and Nature at the Adelaide Zoo: at the frontiers of human geography*, *Transactions*, Institute of British Geographers (20), 275 – 294.
- Ashley, C. (2000) *Applying Livelihood Approaches to Natural Resource Management Initiatives, Experiences in Namibia and Kenya*, Overseas Development Institute, London.
- Avert (2011) *South Africa HIV & AIDS Statistics*, available at <http://www.avert.org/safricastats.htm>, last accessed on 21 January 2011.
- Aylward, B. and Ernts, L. (2003) *Nature Tourism, Conservation, and Development in Kwazulu-Natal, South Africa*, The International Bank for Reconstruction and Development/ The World Bank, Washington D.C.
- Ballard, C. (1988) *The House of Shaka*, Emoyeni Books, Durban.
- Bass, O. (2002) *Adventure, Paradise, Indigenous Culture: „The Kingdom of the Zulu“ Campaign*, Unpublished Doctoral Thesis, University of KwaZulu-Natal, Durban.
- Bebbington, A. (1999) *Capitals and Capabilities: A Framework for Analyzing Peasant Viability, Rural Livelihoods and Poverty.*, 27(12), World Development.

- Belsky, J.M. (2000) *The Meaning of the Manatee: An Examination of Community-based Ecotourism Discourse and Practice in Gale Point, Belize*, Chapter 11 in Charles Zerner, (ed), *People, Plants, and Justice: The Politics of Nature Conservation*, New York, Columbia University Press.
- Berkes, F. (2004) *Rethinking community-based conservation*, Conservation biology, Vol (18), No.3, 621-630.
- Boo, E. (1992) *Tourism and the environment: pitfalls and liabilities of ecotourism development*. WTO News 9:2-4.
- Brooks, S. (2005) *Images of „Wild Africa“: Nature Tourism and the (Re)Creation of Hluhluwe Game Reserve, 1930-1945*, Journal of Historical Geography, (31), 220 - 240, Elsevier.
- Brooks, S. (2004) *National Parks for Natal? Zululand's Game Reserves and the Shaping of Conservation Management Policy in Natal 1920s to 1940s*, Journal of Natal History, (22), 73 – 108, University of Natal Press.
- Brooks, S. (2000) *Changing Nature: A Critical Historical Geography of the Umfolozi and Hluhluwe Game Reserves, Zululand, 1886 to 1947*, Unpublished Doctoral Thesis, Queens University, Kingston, Ontario.
- Brooks, S. (1997) *Ropes of Sand: Soldier Settlers and Nagana in Zululand*, in Jeeves, A. and Crush, C. (1997) *White Farms Black Labour: The State and Agrarian Change in South Africa, 1910 – 50*, University of Natal Press.
- Brooks, S and Spierenburg, M. (2010a) *Creating a commodified wilderness: Tourism, private game farming, and the construction of “third nature” landscapes in KwaZulu-Natal*. Paper to the 9th Northeastern Workshop on Southern Africa, Burlington, Vermont, USA, 9-11 April 2010.
- Brooks, S. and Spierenberg, M. Wels, H. (2010b) *The organization of hypocrisy? Juxtaposing tourists and farm dwellers in game farming in South Africa*, University of Natal Press.

- Broch Due, V and Schroeder, A. (2000). *Producing Nature and poverty in Africa*, Nordiska Afrikainstitutet., Stockholm.
- Bruce, D. (1985) *Preliminary Report on the Tsetse Fly Disease or Nagana in Zululand*, Benett and David, Durban.
- Brown, L. (2006) *Plan B 2.0 - Resourcing a Planet Under Stress and a Civilisation in Trouble*, Earth Policy Institute, New York and London.
- Buckley, R. (2009) *Ecotourism: Principles and Practices*, Cabi Publishers.
- Buchanan, M. (1999) *The Return, The Story of Phinda Game Reserve*, Londolozi Publishers, Revonia, South Africa.
- Buchanan, M and Varty, S. (1996) *I Speak of Africa: The Story of Londolozi Game Reserve 1926 – 1991*, Londolozi Publishers, Revonia, South Africa.
- Carney, D. (1998) *Sustainable Rural Livelihoods: What Contribution Can We Make?* DFID, London.
- Castree, N. and Braun, B. (2001) *Social Nature: Theory, Practice and Politics*, Blackwell Publishers, Oxford.
- Castree, N (1995) *The Nature of Produced Nature*, Antipode (27) 12 – 47.
- Carruthers, J. (1994) *Dissecting the myth: Paul Kruger and the Kruger National Park*, Journal of Southern Africa Studies (20), 263 – 283.
- Chambers, R. and Conway, G.R., (1991) *Sustainable rural livelihoods: Practical concepts for the 21st century*, Institute of Development Studies, Discussion Paper 296.
- Child, B. (2004) *Parks in Transition: Biodiversity, Rural Development and the Bottom Line*, Earthscan, London.

- Chimhowu, A and Hulme, D (2006) *Livelihood Dynamics in Planned and Spontaneous Resettlement in Zimbabwe: Converging and Vulnerable*, World Development (34), No. 4: 728–750.
- Cock, J. and Fig, D. (2002) *From Colonial to Community-Based Conservation, Environmental justice and the Transformation of National Parks (1994-1998)*, In McDonald D. A. (Ed.), *Environmental Justice in South Africa*, Athens and Cape Town: Ohio University Press and University of Cape Town Press. Cape Town.
- Cosgrove, D. (1984) *Social Formation and Symbolic Landscape*, Croom Helm, London.
- Crang, M. (2003) *Telling materials*, in Pryke, M; Rose, G and Whatmore, S. (eds), *Using Social Theory; Thinking Through Research*, Sage Publications, London, 127 – 144.
- Cronon, W. (1995) *The Trouble with Wilderness; Or, Getting Back to the Wrong Nature* Cronon, W (Ed.), *Uncommon Ground: Toward Reinventing Nature*, W.W. Norton, New York.
- Demeritt, D. (1996) *Social theory and the reconstruction of science and geography*, Transactions of the Institute of British Geographers, 21(2), 484-503.
- Dey, (2000) cited in Kitchin, R. and Tate, N.J (2000) *Conducting Research in Human Geography: Theory, Methodology and Practice*, , Harlow: Prentice Hall, 235.
- DFID. (1999) *Sustainable Livelihoods Guidance Sheets*, Department For International Development, available at www.livelihood.org/info/info_guidancesheets.htm, accessed on 2/06/2009.
- Dodson, B. (2002) *Searching for a Common Agenda: Ecofeminism and Environmental Justice*, Chapter 3 in McDonald, D. ed, *Environmental Justice in South Africa*, Ohio University Press and UCT Press.

- Draper, M. Spierenburg, M and Wels, H. (2004) *African dreams of cohesion: elite pacting and community development in Transfrontier Conservation Areas in Southern Africa*, Culture and Organization, 10 (4): 341-351.
- Ecotourism (2006) Online: Available at
http://www.ecotourism.org/webmodules/webarticlesnet/templates/eco_template.aspx?articleid=95&zoneid, accessed on 18/10/2006.
- Ellis, F (2003) *Livelihoods and Rural Poverty Reduction in Tanzania*, World Development, (31), Issue 8, August 2003, 1367-1384.
- Ellis, F. (2000) *Rural Livelihoods and diversity in Developing Countries*, Oxford University Press, Oxford.
- Ellis, F. (1998) *Household strategies and rural livelihood diversification*. Journal of Development Studies. (35), No.1, 1–38.
- Fearn, E. (ed) (2010) *State of the Wild: A Global Portrait*, Wildlife Conservation Society, Island Press, Washington.
- FitzSimmons, M. (1989) *Reconstructing Nature, Environmental and Planning, Society and Space*, Routledge, London.
- Friedman, T. (2008) *Hot, Flat and Crowded: Why the World Needs a Green Revolution – How we can Renew our Global Future*, Penguin Group.
- Gibson, C. (2010) *Geographies of tourism: (un)ethical encounters*, Progress in Human Geography, August 1 2010, (34): 521-527
- Goldman, M. (2011) *Knowing Nature: Conversations at the Intersection of Political Ecology and Science Studies*, University of Chicago Press
- Goriup, P. (ed). and Creed, B (2005) *The International Journal for Protected Area Managers*, Protected Areas Programme, (15) No 2, World Commission on Protected Areas (WCPA), IUCN.

Gove, R. (1995) *Green Imperialism*. Cambridge University Press, Cambridge.

Govender, J. (2011) *Land Cover Changes with Regards to Private Game Farming, Unpublished Masters Dissertation*, SANPAD Project, University of KwaZulu-Natal.

Grove, R. (1990) *Colonial conservation, ecological hegemony and popular resistance: toward a global synthesis*, in *Imperialism and the Natural World*, MacKenzie, J, (ed) Manchester University Press, Manchester, 15 – 50.

Gush, R (2000) *Mkhuze: The Informative Years*, Private publication.

Guy, J. (1979) *The Destruction of the Zulu Kingdom: The Civil War in Zululand, 1879 – 1884*, Longman, London.

Guy, J (1982) *The Destruction and Reconstruction of Zulu Society*, in *Industrialisation and Social Change in South Africa*, edited by Marks, S. and Rathbone, R. 167 – 84, Longman, London.

Hall, C.M. (1994) *Tourism and Politics – Policy Power and Place*, Wiley and Sons.

Hamilton, C. (1998) *Terrific Majesty: The Powers of Shaka Zulu and the Limits of Historical Invention*, David Philip, Cape Town.

Hay, P. (2002) *Main Currents in Western Environmental Thought*, University of New South Wales Press, Sydney.

Hajer, M. (1995) *The Politics of Environmental Discourse: Ecological Modernization and the Policy Process*. Oxford, London.

Honey, M. (2008) *Ecotourism and Sustainable Development, Who Owns Paradise*, 2nd Edition, Island Press.

- Hopkins, H. (1985) *The Long Affray: Poaching Wars 1760 – 1914*. Secker and Warburg, London.
- Hulme, D; Murphree, M (eds) (2001) *African Wildlife and Livelihoods: the promise and performance of community conservation*, James Currey, Oxford.
- Hulme, D. (1998) *Protecting and strengthening social capital in order to produce desirable development outcomes*. London: DFID.
- Hurwitz, N. (1957) *Agriculture in Natal 1860 1950*, Natal Regional Survey, Volume 12, Oxford University Press, London
- Jacobs, J M. (1996) *Edge of Empire: Postcolonialism and the City*, Routledge, London and New York.
- Kidner, D. (2000) Fabricating Nature: A critique of the Social Construction of Nature, *Environmental Ethics* (22), 339 – 357.
- King (2003) *An Explanation of the 1:500 000 General Hydrogeological Map, Vryheid 2730*, Department of Water Affairs and Forestry, Pretoria.
- Kiss, A. (2004) *Is community-based ecotourism a good use of biodiversity conservation funds?* *Trends in Ecology and Evolution* (19) No.5 May 2004.
- Kitchin, R. and Tate, N.J. (2000) *Conducting Research in Human Geography: Theory, Methodology and Practice*, Prentice Hall, Harlow, England.
- Kollmair, M and Gamper, S (2002) *The Sustainable Livelihoods Approach*, Development Study Group, University of Zurich.
- Kooman, E. Stillwell, J. Bakema, A. Scholten, H (2008) *Modelling Land Use Change, Progress and Applications*, Springer, Netherlands.
- Langholz, J. and Kerley, G. (2006) *Combining conservation and development on private lands: An assessment of ecotourism-based private game reserves in the Eastern*

Cape, Centre for African Conservation Ecology Report No. 56. Port Elizabeth: Nelson Mandela Metropolitan University.

Lambert, J. (1995) *Betrayed Trust: Africans and the State in Colonial Natal*, University of Natal Press.

Leharpe, R. (2001) *Africa's Big Five*, Sunbird Publishers.

Leslie, D. (1975) *Life Among the Zulu and Amathonga*, Macmillan.

Lincoln, D. (1995) *Settlement and Servitude in Zululand, 1918-1948*, International Journal of African Historical Studies, (28) 1, 49-67.

Lindsay, W. (1998) *Integrating parks and pastoralists: some lessons from Amboseli*, Cambridge University Press.

MacKenzie, J. (1988) *The Empire of Nature: Hunting, Conservation and British Imperialism*, Manchester University Press, Manchester.

MacKenzie, J. (1990) *Imperialism and the Natural World*, Manchester University Press, Manchester.

MacKinnon, A.S. (1999) *The Persistence of the Cattle Economy in Zululand, South Africa, 1900-50*, in Canadian Journal of African Studies, (33) 1, 98-135.

Markwell, K. (2001) *An intimate rendezvous with nature? Mediating the tourist-nature experience at three tourist sites in Borneo*, Tourist Studies June 2001 vol. 1 no. 1, 39-57.

Mather, C. (1996) *The View From Outside? Interpreting Oral Testimonies from Rural South Africa*, South African Geographical Journal 78(1), 13-19.

May J (1996) *Assets, Income and Livelihoods in Rural Kwazulu-Natal*, cited in Lipton, M. and Ellis, F (1996) *Land Labour and Livelihoods in Rural South Africa: Vol 2 Kwazulu-Natal and Northern Province*, Indicator Press, Durban.

- McDonald, D. (2002) *Introduction: What is Environmental Justice?*, in David McDonald, (ed), *Environmental Justice in South Africa*, Athens, Ohio and Cape Town University Press.
- Mowforth, M. and Munt, I. (2005) *Tourism and Sustainability, Development and New Tourism in the Third World*, Second Edition, Routledge, New York.
- Mtshali, S. (2002) *Household Livelihood Security in Rural KwaZulu-Natal, South Africa*, Phd Thesis, Wageningen University, Wageningen, Netherlands.
- Narayan, D. Patel, R. Schafft, K. Rademacher. Koch-Schulte, S. (2000) *Voices of the poor. Can anyone hear us?* Oxford University Press.
- Nash, D. (1996) *Anthropology of Tourism*, United Kingdom, Pergamon.
- Naughton-Treves, L. (1997) *Farming the Forest Edge: Vulnerable Places and People around Kibale National Park, Uganda*, The Geographical Review, 87, 1.
- Naylor, S (2005) *Historical Geographies of Science – Places, Context, Cartographies*, British Journal for the History of Science, Cambridge University Press.
- Neumann, R. (1996) *Dukes, Earls, and Ersatz Edens: Aristocratic Nature Preservationists in Colonial Africa*, Environment and Planning D, Society and Space 14:79 - 98.
- Neumann, R. (2000) *Primitive Ideas: Protected Area Buffer Zones and the Politics of Land in Africa*, In: Broch-Due, V and Schroeder, R.A. (eds) *Producing nature and poverty in Africa*, Nordisk Afrikainstitutet, Stockholm, Nordisk Afrikainstitutet.
- Nguni Cattle Breeders Society (2011) Average Cattle Sales 2011, available at <http://www.ngunicattle.info/Sales-Results.htm>, accessed on 3 June 2011.
- Norton, A. (1996) *Experiencing Nature: The Reproduction of Environmental Discourse through Safari Tourism in East Africa*, Geoforum 27, 3.

- Owen-Smith, G. (2002) *A Brief History of the Conservation and Origin of the Concession Areas in the Former Damaraland*, Integrated Rural Development and Nature Conservation (IRDNC), Namibia.
- Owen-Smith, G. (2009) Interview with Garth Owen Smith, Co-Director Integrated Rural Development and Nature Conservation (IRDNC), Wereldsend, Namibia, WWF.
- Parker, D. (2004) *The Feeding Biology and Potential Impact of Introduced Giraffe in the Eastern Cape Province, South Africa*, Unpublished Master of Science Dissertation, Rhodes University.
- Parker, D and Bernard, R. (2005). *The diet and ecological role of giraffe (Giraffa camelopardalis) introduced to the Eastern Cape, South Africa*. Journal of Zoology, 267, 203-210.
- Pedynowski, D. (2003) *Science(s) – which, when and whose? Probing the metanarrative of scientific knowledge in the social construction of nature*, Progress in Human Geography, 27(6), 735-752.
- Pinnock, D. (1996) *Superparks: an Impossible Dream? Getaway*, November 1996.
- Platzky, L and Walker, C. (1985) *The Surplus People: Forced Removals in South Africa*, Raven Press.
- Potter, D. (1931-1947, 1934, 1941) Official Diaries, Private Collection.
- Proctor, J.D. (1998) *The Social Construction of Nature: Relativist Accusations, Pragmatist and Critical Realist Responses*, Annals of the Association of American Geographers 88.
- Rakodi, C. (2006) *Relationships of Power and Place: the Social Construction of African Cities*, Geoforum, 37, 3, 312-17.

- Rassool, C and Witz, L. (1996) *South Africa: A World in One Country. Moments in International Tourist Encounters with Wildlife, the Primitive and the Modern*, Cahiers d'Etudes Africaines.
- Reardon, T. and Vosti, S. (1995) *Links between rural poverty and the environment in developing countries: Asset categories and investment poverty*. World Development Trust, Vol 23, No.9, 1495–1506.
- Ribot, J. (2000) *Rebellion, Representation and Enfranchisement in the Forest Villages of Makacoulibatang, Eastern Senegal*; In: Zerner, C. (ed) (2000) *People, Plants, and Justice: The Politics of Nature Conservation*, New York, Columbia University Press.
- Robertson, M (1990) *Dividing the land: an intro to apartheid land law*, in Murray, C. and O'Regan, C. *No place to rest: forced removals and the law in South Africa*, Oxford University Press, Cape Town.
- Robinson, G.M. (1998) *Methods and Techniques in Human Geography*, John Wiley and Sons, New York.
- Ryan, C. (2002) *The Tourist Experience*, Second Edition, Continuum, London.
- Said, E. (1978) *Orientalism*, Routledge and Kegan Paul, London.
- Sayer, J. Campbell, B. (2004) *The Science of Sustainable Development: Local livelihoods and the Global Environment*, Cambridge University Press, Cambridge.
- Scoones, I. (1998) *Sustainable rural livelihoods: A framework for analysis*, Institute of Development Studies, University of Sussex. Brighton, U.K.
- Sibley, D. (1995) *Geographies of Exclusion: Society and Difference in the West*, Routledge, London.
- Skelcher, B. (2004) *Apartheid and the removal of black spots from Lake Bhangani in KwaZulu-Natal, South Africa*, Journal of Black Studies, J-stor.

- Smith, N. (1990) *Uneven Development: Nature, Capital and the Production of Space*, 2nd Edition, Oxford Basil Blackwell.
- Smith, S. (2001) *Doing Qualitative Research: From Interpretation to Action*, In Limb, M. and Dwyer, C. (eds) *Qualitative Methods for Geographers Issues and Debates*, Arnold Publishers, London.
- Soper, K (1995) *What is Nature? Culture, Politics and the Non-Human*, Blackwell Publishers, Oxford.
- Southern African Regional Poverty Network (SARPN) (2011) *Department of Social Development, Nodal Baseline Survey – Umkhanyakude*, available at http://www.sarpn.org/documents/d0003004/Umkhanyakude_DSD_nodal_baseline.pps , last accessed 22 October 2011
- Southern Africa Report Association. (2005) Report 23, SARA Publishers.
- Statistics South Africa (1996) *National Census Data*, Government Printed.
- Statistics South Africa (2001) *National Census Data*, Government Printed.
- Thanda PGR. (2009), available at www.thanda.com/home, accessed on 14/08/2009.
- UNDP and Wanmali, S. (1999) *Participatory assessment and planning for sustainable livelihoods*, United Nations Development Programme Sustainable Livelihoods Documents. <http://www.undp.org/sl>, accessed 27/05/2007.
- Umkhanyakude District Municipality (2004) *Umkhanyakude Integrated Development Plan*, Government Printed.
- Umkhanyakude District Municipality (2009) *Umkhanyakude Integrated Development Plan*, Government Printed.

- Valentine, G. (2005) *Tell Me About Using Interviews as A Research Methodology*, In Flowerdew R. and Martin, D. (eds) *Methods in Human Geography*, Second Edition, Pearson Education Limited, England.
- Vaughan-Kirby, F. (1916) *Game and Game Preservation in Zululand*, South African Journal of Science.
- Vaughan-Kirby, F. (1896) *In Haunts of Wild Game: A Hunter-Naturalist's Wanderings from Kahlamba to Libombo*, William Blackwood and Sons, London.
- Wall, G. and Tao, T. (2009) *Tourism as a sustainable livelihood strategy*, Tourism Management 30 (2009) 90–98, Elsevier
- Wall, G. (1997) *Is Eco-Tourism Sustainable?*, Environmental Management (21), No. 4, pp. 483–491, Springer-Verlag, New York.
- Warner, K. (2002) *Moving Forward: Developing pathways for Sustainable livelihoods through forestry*. Paper to the 2nd International Workshop on Participatory Forestry in Africa, Food and Agricultural Organisation of the United Nations, Italy.
- Whatmore, S. (1999) *Culture-Nature*, In Cloke, P; Crang, P. Goodwin, M (eds) (2005) *Introducing Human Geographies*, Arnold and Oxford University Press, Oxford.
- Whittaker, J. and Mercer, D. (2004) *The Victorian Bushfires of 2002-2003 and the Politics of Blame: a Discourse Analysis*, in Australian Geographer, 35(3), 259-287.
- Williams, M. (2010) *Chieftaincy, the State and Democracy: Political Legitimacy in Post Apartheid South Africa*, Indiana University Press.
- Worden, N. (1994) *The Making of Modern South Africa: Conquest, Segregation and Apartheid*, Blackwell Publishers, Oxford.

Zerner, C. (2000) *Introduction: Toward a Broader Vision of Justice and Nature Conservation*, in Zerner, C (ed), *People, Plants, and Justice: The Politics of Nature Conservation*, Columbia University Press, New York.

Zungu, V and Brooks, S. (2004) *New Language, New Practices? Assessing Conservation Partnerships in KwaZulu-Natal*, Paper to Conference, Ten Years of Democracy in Southern Africa: Historical Achievement, Present State, Future Prospects, UNISA.

APPENDIX A

Homestead Livelihood Questionnaire Survey



This survey forms part of the research for an MSocSci in Geography and Environmental Management within the School of Life and Environmental Sciences at the University of KwaZulu-Natal. This research is in collaboration with the South African Netherlands Programme for Alternatives in Development (SANPAD), looking at the current context to agrarian change and the development of wildlife based forms of land use in Kwazulu-Natal.

The Aim of this Particular Survey is to:

- Assess the current livelihood status of the average household in the community of Ingwenya.
- Understand how livelihoods and perceptions have changed with the conversion from commercial agriculture to wildlife forms of land use.
- Establish if wildlife-based forms of land use are reducing or creating poverty.
- Identify what the shift from commercial agriculture to wildlife based forms of land use means for rural livelihood strategies.

Your Involvement in this Research

Your anonymity and confidentiality will be ensured at all times. Your personal details shall under no circumstances be disclosed. Your participation is voluntary and you may withdraw your permission to participate at any stage without any negative consequences. This information shall assist in establishing trends and current needs in the area in terms of rural livelihoods. This information may lead to possible solutions to many social and environmental problems in the area. It is requested that you give as full information as possible as to ensure a comprehensive and accurate data set. Your participation in this survey will be greatly valued.

Contract between Researcher and Respondent***Student Name:*** ***Andrew Hickman***

Student Number: 202523867

Contact Details: 082 883 5513

Email: andrew.hickman@erm.com

If you have any queries or concerns with any aspect of this work, you may also contact the dissertation supervisor whose details are provided below:

Supervisor: ***Dr Shirley Brooks***

Contact Details: (031) 260 2416

Email: brookss2@ukzn.ac.za

I, Andrew Hickman, expressly undertake to keep and hold secret and confidential all information, however obtained, of those involved in this study, and all matters associated therewith, and shall not use any information obtained for any other reason than set out above. I will not disclose or discuss the same with any other party without the express prior consent of the individual. All information presented in the final dissertation shall not be with specific reference to any particular individual.

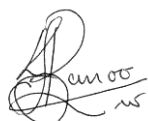
This Undertaking shall be valid and effective for a period of 10 years.

Thus done and signed at, UKZN.

WITNESSES:



1.



2.



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Andrew Hickman
Researcher

Questionnaire Survey

Name of interviewer: _____

Date: _____

Name of respondent: _____

Area: _____

Name of household head: _____

GPS: _____ S

_____ E

1) Human Capital**General Household Demographics**

Number of people in household? _____

Names of people in household – start with head - Name and surname	Sex: m/f	Age:	Health: Good/Bad - illness/disability?	Highest Education Level obtained? Skills etc?	Current employment? Or Grade if at school?	Employer?	School name?	Where are they employed?
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								

2. Social Capital

What do you do for fun in the area? Socializing, sport etcetera? _____

Do you or anyone in the household belong to an organization/group/team? for example - Church etcetera

What are the different roles of the family members in your household? Eg, the women fetch the water etcetera _____

3. Natural Capital

Does your household grow their own crops? Yes/No _____

If Yes, who grows them and what do they grow? _____

Do friends, other family members or anyone else help you with your farming? If Y, what do they help with?

If Yes, how do you repay them? _____

When do you grow these crops? For example: all year round? Seasonally?
Etcetera

Do you farm livestock in the area? Yes/No _____

1. What livestock do you farm? _____

2. How many does your household own? _____

What are some of the difficulties of farming in the area?

Where do you get your water from?

- | | |
|-----------------------------------|-------|
| 1. Inside dwelling (tapped water) | _____ |
| 2. Community standpipe/JoJo Tank | _____ |
| 3. Raintank | _____ |
| 4. Dam/ pool/ stagnant water | _____ |
| 5. River | _____ |
| 6. Other – Please specify: _____ | |

Does this differ in winter and summer? How?

How far do you have to walk to get water?

- | | |
|---------------------|-------|
| 1. 50 – 100 metres | _____ |
| 2. 100 – 300 metres | _____ |
| 3. 300 – 600 metres | _____ |
| 4. 600 – 1Km | _____ |
| 5. 1 – 2 Km | _____ |

6. 2 – 4 Km _____
7. 4 – 8 Km _____
8. More than 8 Km _____

What materials do you build your house with? Where do you get these materials from? for example: Thatch grass for roof, from Mkuze etcetera? _____

4. Physical Capital

What is your source of lighting?

1. Electricity _____
2. Gas _____
3. Paraffin _____
4. Candles _____
5. Solar _____
6. Other _____

Where do you do your shopping? _____

How far is the closest doctor? _____

What do you think the government does for you? _____

What would you like the government to do for you? _____

5. Financial Capital

What are your sources of income? *Tick where appropriate*

1. Household member/s employed locally _____
2. Household member/s doing migrant labour and sending money back _____
3. Household member/s Pension _____
4. Child Grants _____
5. Own Businesses – Please specify: _____

6. Other – Please specify: _____

What is your total household income per month?

1. None _____
2. R1 – 200 _____
3. R201 – 400 _____
4. R401 – 800 _____
5. R801 – 1,600 _____
6. R1,601 – 3,200 _____
7. R3,201 – 6,400 _____
8. R6,401 – 12,800 _____
9. R12,801 – 25,600 _____
10. R25,601 – over _____

What do you spend most of your income on? for example: Food, clothes, fuel, transport, alcohol, school fees? etcetera? List your major monthly expenses: _

General – Perceptions of area and land use change

Do you think that changing agricultural farms (cattle farms) to game reserves is a good thing, Yes/No why?

1. For the area? _____

2. For the community? _____

Has this change in the area affected you or your household in any way? If Yes,
How? _____

Do you know anyone that used to work on an agricultural farm before it was
changed to a game farm? If Yes, Who, which agricultural farm, what is the game
reserve called, who did they work for etcetera? _____

What do you feel the government does for you and what would you like the
government to do for you in the future?

APPENDIX B

Game Reserve Manager Questionnaire Survey



This survey forms part of the research for an MSocSci in Geography and Environmental Management within the School of Life and Environmental Sciences at the University of KwaZulu-Natal. This research is in collaboration with the South African Netherlands Programme for Alternatives in Development (SANPAD), looking at the current context to agrarian change and the development of wildlife based forms of land use in KwaZulu-Natal. The following PGRs have been selected to participate in the survey.

Private Game Reserves (PGR's)
1. Mun-Ya-Wana (Phinda, Mziki, Zuka)
2. Thanda and Intibane
3. Mkuze
4. Kube-Yini

1. Mun-Ya-Wana (Phinda, Mziki, Zuka)
2. Thanda and Intibane
3. Mkuze
4. Kube-Yini

The Aim of this Particular Survey is to:

- Establish the driving forces behind the growing trend to convert traditional agricultural farms to wildlife-based forms of land-use across the Zululand region.
- Investigate the establishment of the PGRs, their current tourism activities, socio-economic trends within the industry and environmental/ conservation issues that have been encountered.
- Assist in the mapping and remote sensing analysis of the vegetation change that has occurred across the selected region.

Your Involvement in this Research

Your anonymity and confidentiality will be ensured at all times. Your personal details are not required for this study and under no circumstances will they be disclosed. Your participation is voluntary and you may withdraw your permission to participate at any stage without any negative consequences. A copy of the completed dissertation may be obtained by you or your organisation on request. This information may assist your organisation to establish trends, improve operations and lead to possible solutions to many social and environmental problems that may occur in the establishment and operation of your game reserve. It is requested that one give as full information as possible as to ensure a comprehensive and accurate data set. Your participation in this survey will be greatly valued and will also provide your organisation with a wealth of knowledge on the conservation and tourism sector in your region.

Contract between Researcher and Respondent/ PGR

Student Name: ***Andrew Hickman***

Student Number: ***202523867***

Contact Details: ***082 883 5513***

Email: andrew.hickman@erm.com

If you or your organisation has any queries or concerns with any aspect of this work, you may also contact the dissertation supervisor whose details are provided below:

Supervisor: ***Dr Shirley Brooks***

Contact Details: ***(031) 260 2416***

Email: brookss2@ukzn.ac.za

I, Andrew Hickman, expressly undertake to keep and hold secret and confidential all information, however obtained, regarding the activities of any of the PGRs involved in this study, and all matters associated therewith, and shall not use any information obtained for any other reason than set out above. I will not disclose or discuss the same with any other party without the express prior consent of the PGRs. All

information presented in the final dissertation shall not be with specific reference to any particular PGRs.

This Undertaking shall be valid and effective for a period of 10 years.

Thus done and signed at UKZN.

WITNESSES:



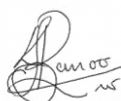
1.



.....

Andrew Hickman

Researcher



2.

ESTABLISHMENT OF THE GAME RESERVE*Please complete the following:****RESERVE DETAILS***

Name of respondent:	
Contact details of respondent:	
Name of Game Reserve (Trading Name):	
Name of land owner/s or organisation that owns the reserve:	
Physical address:	
Postal address:	
Email address:	
Website address:	

Date of establishment: _____

Previous land use/s: _____

Name of previous owner/s: _____

Telephone number of previous owner/s: _____

Current total area (ha) of the reserve: _____

CONVERSION TO A GAME RESERVE

What are the reasons for the conversion from traditional agriculture to a Game Reserve? _____

What have been some of the biggest constraints in establishing a game reserve with regards to:

a) Financial constraints For example, cost of land, costs of converting land from agriculture to game, value of the rand etcetera? _____

b) Human resource constraints For example, finding skilled builders to build high quality accommodation, services, skill labour, reliable labour etcetera? _____

c) Government constraints For example, environmental Impact Assessments (EIA's) and approvals, translocation policies, BEE policies, land taxes, land redistribution etcetera? _____

d) Environmental constraints For example, lack of quality and quantity of water, vegetation change (alien vegetation), animals dying from diseases etcetera? _____

General Constraints/ Added Detail: _____

What are some of the reserves plans for the next 5 years? _____

TOURISM RELATED ACTIVITIES

Does your reserve allow hunting? _____

How long has the tourism aspect of this reserve been operational?

What are the reserves three biggest attractions?

1) _____

2) _____

3) _____

Who is the target market for your reserve? _____

How is the reserve marketed (For example, internet, tour companies, brochures, outfitters etcetera)? _____

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Who is your dominant cliental/tourist origin (For example, British, German, South Africa etcetera) Please provide a percentage?_____

Do you facilitate day visitors?_____

What activities does your reserve offer (For example, conference centre, wellness centre, game drives/walks, fishing trips, hunting etcetera)?_____

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There are approximately 20 lines visible. The paper appears to be a standard notebook page or a sheet of stationery.

What are your projected tourist numbers for the coming year?_____

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Accommodation Details

Accommodation Type (Luxury lodge, rustic cabins, private holiday homes etc – please specify):	Date of Establishment of Accommodation Type	Tourist Capacity (Please specify bed numbers for each accommodation type):	Tourist Price Range (Please specify for each accommodation type):	Average Duration of Stay (Please specify the average time guests book into a particular accommodation type):	Additional Information:

Accommodation Type (Luxury lodge, rustic cabins, private holiday homes etc – please specify):	Date of Establishment of Accommodation Type	Tourist Capacity (Please specify bed numbers for each accommodation type):	Tourist Price Range (Please specify for each accommodation type):	Average Duration of Stay (Please specify the average time guests book into a particular accommodation type):	Additional Information:

Accommodation Type (Luxury lodge, rustic cabins, private holiday homes etc – please specify):	Date of Establishment of Accommodation Type	Tourist Capacity (Please specify bed numbers for each accommodation type):	Tourist Price Range (Please specify for each accommodation type):	Average Duration of Stay (Please specify the average time guests book into a particular accommodation type):	Additional Information:

LOCAL COMMUNITIES AND EMPLOYMENT

PREVIOUS LABOUR AND LAND TENANTS

Numbers of staff employed under previous land use (If unsure, please state so and give an estimated figure)? _____

How many of those workers still work or live on the reserve (Please specify)? _____

If there are still workers from the previous land use, what jobs do they currently hold (Please specify)? _____

Have there been any issues related to tenants or farm workers with the conversion from agriculture to game reserve (Please specify)? _____

CURRENT LABOUR

Number of labourers/staff both permanent, temporary/contractors that work for the reserve?
(Please provide available staff lists)

Permanent: _____

Temporary/ Contractors (Please specify work conducted): _____

What sort of work is outsourced? (For example. alien plant control, game fencing etcetera)

What is the reason for outsourcing work at the reserve? _____

[illegible]

Do staff receive any benefits? (For example. Food, accommodation, medical aid, dependant's benefits, staff training etcetera – Please specify all benefits)? _____

[illegible]

Has your reserve sent any staff on training (Please specify)? _____

[illegible]

What is the closest community to your reserve? _____

Do you know the name of the InDuna of this community? _____

Do you have any problems with local communities (Please specify)? _____

Does your reserve have a community liaison? _____

Additional Detail/Comments _____

ENVIRONMENTAL AND CONSERVATION ISSUES

What are some of the game species that you have introduced into the reserve? Big five?

(Please provide lists if possible) _____

What vegetation types occur on the farm (For example. grassland, thicket, savanna, forest etcetera)? _____

How has vegetation changed since the land use change? _____

Is poaching a problem? _____

Does your farm have an anti poaching unit? _____

If there is poaching, is the poaching from local communities or organised syndicates?__

What is being poached?_____

What do you feel is the greatest threat to conservation in the area?_____

Does your reserve have formal management plans? (Please provide a copy if possible)__

Additional Detail/Comments_____

[illegible]

What has been the greatest cost in establishing the reserve? _____

What do you feel is the carrying capacity, according to the market, for PGRs in the area?

Do you feel there are too many PGRs in KZN and in particular Northern Zululand? _____

What is your reserve's contribution to Black Economic Empowerment (BBBEE) and social development in this area? _____

Please specify initiatives, past projects that your reserve has undertaken to assist local communities? _____

What projects do you feel would be the most worthwhile in the future (for either conservation and/or local communities)? _____
