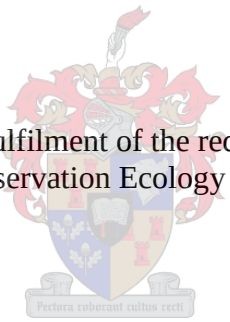
Hunting as a Conservation Tool:

Investigating the use of hunting in CBNRM programs; a case study of the Ntabethemba Community Reserve, South Africa

by

Justin William Gird



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Declaration

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Abstract

The conservation of resources which fall under communal tenure has been a major dilemma for the past 60 years. In South Africa communal lands support more than a quarter of the country's citizens, mostly the poorest members of society whose livelihoods rely heavily on natural resources. Wildlife enterprise is an alternative land use strategy for implementing community based resource management on communal lands. Additionally, safari hunting has been recognised as an efficient means of initiating wildlife based land use practises. In the 1980's a community owned game reserve, which utilised safari hunting as an income source, was established on one of South Africa's black homelands, the Ciskei. Since then, the reserve has been disbanded but little is known about how it operated, the reason it was formed or why it failed.

The aim of this study was twofold: firstly, to document and understand the happenings of a failed community owned hunting reserve in South Africa's Eastern Cape Province and secondly, to determine what level of support there would be amongst the local residents if the reserve was to be re-established. Semi structured, qualitative interviews were conducted to gather information about the reserve from key informants. Structured, randomly selected household surveys were used to gauge local residents support on the idea of having the reserve re-established. Additionally, in doing so it was possible to view, though indirectly, the thoughts and attitudes of the residents to the notion of safari hunting as a land use option.

In review of the reserve history it was found that complexities that make up the social settings of communal lands in South Africa were ignored and dealt with through the age-old approach of top-down management regimes. Once the power of the initial authorities was lost the entire project was doomed to failure as local residents felt no need to keep the project alive. Results showed that 73.7% of the respondents would support the redevelopment of the Ntabethemba Reserve while 19.5% would not. The remaining 6.8% could not say whether they would or would not. The majority of the respondents (73%) believed that the area should be marketed for safari hunters, whilst 13% were against it, 9% were neutral and 5% were unsure.

The Ntabethemba Reserve can be viewed as a 'joint-management' project where management responsibilities were adopted by a non-community party. If a future project is to be undertaken it needs to be aware of the complex socio-ecological setting of the area and account for this in ways that are beyond those advocated in the traditional approach to protected area conservation. The highly skewed distribution of livestock ownership needs to be taken into consideration in that those few individuals who own the most livestock would lose the most from any development that reduces

grazing lands. Both the benefits and the costs need to be distributed in such a way that a situation is avoided where only a few are benefiting at the expense of others.

A clay ox made by a young boy from Thembalethu Village.
(Photographed by Author)

"People are not going to care about animal conservation unless they think that animals are worthwhile"

Sir David Attenborough
www.twitter.com @SirDavidBBC
19 June 2013

Opsomming

Die bewaring van hulpbronne in gebiede met kommunale grondregte is reeds vir die afgelope 60 jaar uiters problematies. In Suid-Afrika is meer as ‘n kwart van alle landsburgers afhanklik van kommunale grondgebiede vir hulle lewensonderhoud. Dit is hoofsaaklik die armste lede van die gemeenskap wat op die natuurlike hulpbronne in hierdie gebiede staatmaak. Natuurlewe-ondernemings bied ‘n alternatiewe strategie vir grondverbruik, wat die implementasie van gemeenskapsaangedrewe hulpbronbestuur op kommunale grond moontlik maak. Daarmee gepaard, is safari-jag ‘n erkende en effektiewe metode om praktyke rondom natuurlewe-gesentreerde grondverbruik te inisieer.

Gedurende die 1980’s is ‘n natuurreservaat met gemeenskapsregte in een van Suid-Afrika se swart tuislande, naamlik die Ciskei, gevestig. Safari-jag is as inkomstebron in hierdie reservaat benut. Die reservaat is sedertdien ontbind. Daar is egter min inligting oor hoe die reservaat bedryf is, oor die redes waarom dit geskep is, of waarom dit misluk het.

Hierdie studie was tweedoelig: eerstens om die gebeure rondom ‘n mislukte jagreservaat met gemeenskapsregte in die Oos-Kaapprovinsie te dokumenteer en te begryp, and tweedens, om te bepaal of, en in hoe ‘n mate, die plaaslike inworners die hervestiging van die reservaat sou ondersteun. Half-gestruktureerde, kwalitatiewe onderhoude is gevoer om inligting oor die reservaat van sleutelinformante in te win. Gestruktureerde, ewekansig geselekteerde huishoudelike steekproewe is gedoen om die steun vir die moontlike hervestiging van die reservaat te peil. Op indirekte wyse was dit verder moontlik om inwoners se houdings en benaderings tot safari-jag as grondverbruikerskeuse te evalueer.

Toe die geskiedenis van die reservaat in oorsig geneem is, is bevind dat die ingewikkelde sosiale agtergrond van gemeenkappe met kommunale grondregte in Suid-Afrika verontagsaam is, en dat die afgeleefde bestuursbenadering “van-bo-af-ondertoe” ook hier gebruik is. Toe die eermalige owerhede al hulle uitvoerende magte verloor het was die projek tot mislukking bestem, omdat die plaaslike inwoners geen rede gesien het om dit aan die lewe te hou nie. Die resultate het getoon dat 73.7% van die respondente die herontwikkeling van die Ntabethemba Reservaat sou ondersteun, terwyl 19.5% dit nie sou doen nie. Die oorblywende 6.8% kon nie sê of hulle ten gunste daarvan was of nie. Die meerderheid van die respondente (73%) is van mening dat die gebied as safarijaggebbied bemark moet word, terwyl 13% daarteen was, 9% neutraal en 5% onseker was.

Die Ntabethemba-reservaat kan eerder as ‘n projek van “gesamentlike-bestuur” beskou word, as ‘n inisiatief wat uiteraard op “kommunaal-gebaseerde natuurlike hulpbronbestuur” (CBNRM) gegrond

is. As ‘n projek in die toekoms weer geloots word, moet sorgvuldig ag geslaan word op die ingewikkelde sosio-ekologiese agtergrond van die gebied. Dit mag nie, soos in die verlede, bloot volgens die tradisionele benadering tot die bewaring van beskermde gebiede van stapel gestuur word nie. Die erg skewe verspreiding van veebesit is uiters belangrik in hierdie konteks, aangesien die paar individue wat die meeste vee besit, die grootste verliese sal moet dra as ‘n ontwikkeling plaasvind wat weidingsverliese behels. Beide voordele en verliese moet opgeweeg en eweredig versprei word, sodat ‘n paar mense nie ten koste van ander begunstig word nie.

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Glossary

Biltong hunter	A term used to describe local South African hunters who hunt mainly as a means of acquiring game meat.
Hunting Outfitter	The person, who markets, assists with, offers, presents or organizes the hunt of a wild animal. Only South African citizens or permanent residents can be registered as an outfitter in South Africa. In order to register as an outfitter the applicant must have operated as a Professional Hunter for more than three years or have conducted over 100 hunts in less than three years (see Government Gazette No. 36743, Notice No. 809, of 12 August 2013).
Professional Hunter (PH)	The person who conducts and guides a hunt in order to enable his/her client to hunt a wild animal. A professional hunters (PH) needs to be registered with the Provincial Department of Environmental Affairs in the province in which he/she wished to operate. In order to be registered as a PH, a person must undergo an official professional hunter's course, in which both written and practical testes are taken (see Government Gazette No. 36743, Notice No. 809, of 12 August 2013).
Trophy hunter	Generally refers to an international hunter or client who hunts mainly for sporting purposes. A trophy hunter will in most cases take a memento (trophy) of the hunt in the form of; horn, antler, hide or hair or the hunted animal.

Abbreviations

ADM	African Democratic Movement
ANC	African National Congress
Att	Attitudes
BI	Behavioural Intention
CAMPFIRE	Communal Areas Management Programme for Indigenous Resources
CBC	Community Based Conservation
CBD	Convention on Biological Diversity
CBNRM	Community Based Natural Resource Management
CHASA	Confederation of Hunters Associations of South Africa
CLMB	Ciskei Livestock and Marketing Board
CNIP	Ciskei National Independence Party
CONTOUR	Ciskei National Nature Conservation and Tourism Board
DEAET	Department of Economic Affairs, Environment and Tourism
DEAT	Department of Environmental Affairs and Tourism
DEDEA	Department of Economic Development and Environmental Affairs
ECPB	Eastern Cape Parks Board

ECPTA	Eastern Cape Parks and Tourism Agency
ECTB	Eastern Cape Tourism Board
GIS	Geographic Information System
IASCP	International Association for the Study of Common Property
ICDP	Integrated Conservation Development Projects
IUCN	International Union for Conservation of Nature
LSU	Live Stock Unit
MDG	Millennium Development Goals
NEMA	National Environmental Management Act
PHASA	Professional Hunters Association of South Africa
RA	Released Areas
RDP	Reconstruction and Development Programme
SAWMA	South African Wildlife Managers Association
SN	Subjective Norms
TOPS	Threatened or Protected Species Regulations
TRA	Theory of Reasoned Action
UNCCD	United Nation Convention to Combat Desertification
WRSA	Wildlife Ranching South Africa

Chapter 1: Introduction

The problem

South Africa is a country where conservation and rangeland protection have become major goals. As a signatory to the Millennium Development Goals (MDG) South Africa committed to having nine percent of its terrestrial area under environmental protection by 2015 and 17% by 2020 (MDG 7, Stats SA 2013; Stats SA 2010). In 2012 the percentage of total terrestrial area under formal protection was 6.7% (Stats SA, 2013). Therefore, 2.8 million hectares (2.3%)[1] of South Africa's terrestrial area needs to be incorporated under the status of protected in order to meet the 2015 goal. Furthermore, an additional 1.9 million hectares (1.6%) of land needs to be listed as protected every year in order to reach the 2020 goal. Simultaneously, the country has dedicated itself to poverty alleviation and economic development under the banner of sustainable development (Stats SA, 2013, 2010). To achieve these goals South Africa needs to look beyond the scope of exclusion methods and traditional protected areas (parks), whereby land is locked away from the general public and is only accessible to the select few who can afford to visit it (Adams *et al.*, 2004; Jones and Murphree, 2004). A more holistic approach to environmental protection is needed.

Inclusive approaches to conservation adopted through Community Based Conservation (CBC) initiatives more commonly known as Community Based Natural Resource Management (CBNRM), strive to extend environmental protection to areas beyond park borders (Child, 1996; Mulrennan *et al.*, 2012). Although CBNRM has been widely criticised over the past years (Dressler and Büscher, 2008; Dressler *et al.*, 2010), it is still recognised as being one of the few viable solutions for implementing conservation efforts on communally owned lands (Child and Barnes, 2010; Turner, 2004). CBNRM aims to develop mechanisms of conservation that assist with local human upliftment and thereby create incentives for sustainable natural resource management (Jones, 1999; Jones and Murphree, 2004). Moreover, CBNRM focuses on the idea that groups of people who share a resource are better at conserving that resource if they are able to gain benefits from it (Child and Barnes, 2010; Child, 1996, 1993). For programs to be successful, benefits then need to outweigh the costs imposed by having to conserve the resource in question (Child and Barnes, 2010). By establishing CBNRM efforts on communal lands, countries are able to not only increase the territory under conservation (protection) but also to provide the residents of that land with opportunities for growth (Child, 1993).

[1] South Africa's total terrestrial area is taken at 1 219 602 km^2 (>121 million hectares) (Stats SA, 2013)

The ideals put forward in CBNRM are seen as a major shift away from the conventional and colonial methods of conservation, often dubbed 'fortress conservation' (Hutton *et al.*, 2005; Murphree, 2002). These heavily entrenched rule-sets were based on the principle that in order to preserve nature, humans need to be excluded from it (Bocchino and Burroughs, 2013; Siurua, 2006). Fundamentally the approach of fortress conservation was a biocentric one which focused primarily on the intrinsic value of nature (Jones and Murphree, 2004). CBNRM on the other hand views humans as part of nature and places emphasis on utilitarian conservation (Child and Barnes, 2010; Jones and Murphree, 2004). Since colonial independence, a number of southern African countries have adopted the more inclusive approach and incorporated it into their conservation efforts (Bocchino and Burroughs, 2013; DeGeorges and Reilly, 2009; Dressler *et al.*, 2010). South Africa could benefit a great deal by implementing CBNRM initiatives on its communal lands.

South Africa's communal lands support some of the country's most impoverished citizens as can be seen in the case of the former Eastern Cape Homelands (Bennett *et al.*, 2010). Additionally many of these communal lands incorporate extensive tracts of natural vegetation (Vetter, 2013). Some vegetation biomes present in communal lands are known to support high levels of species diversity throughout the taxa and include endemic, threatened or critically endangered species (Perera *et al.*, 2011). Furthermore, people who reside on communal lands are often heavily reliant on natural resources for both traditional cultural practises and to supplement their livelihoods in the form of food or income (Cocks *et al.*, 2012; Dovie *et al.*, 2002; Vetter, 2013). For South Africa to avoid the risk of losing high levels of natural biodiversity, culturally important traditional practises and the safety net of the rural poor, efforts need to be directed towards ensuring resource conservation on communal lands (Vetter, 2013).

Recently it has been suggested that wildlife should be considered as a resource for creating economic opportunities on South Africa's communal range lands (Chaminuka, 2013). Wildlife is one of the most common natural resources that provide the economic foundations in southern Africa's CBNRM projects (Child and Barnes, 2010; Fisher and Bickel, 2009). By exploiting the various consumptive and non-consumptive uses of wildlife, CBNRM projects across the subcontinent are able to generate tangible incentives for rural people to conserve wildlife and the natural landscape (Arntzen *et al.*, 2007; Fisher and Bickel, 2009; Jones and Murphree, 2004). While it is becoming increasing clear that the costs associated with living with wildlife are not always taken into consideration in CBNRM projects, there are still a number of examples which demonstrate success (Turner, 2004).

Safari hunting has played an important role in providing a lucrative means of capitalising on wildlife within CBNRM programs (DeGeorges and Reilly, 2009; Fisher and Bickel, 2009; Lele *et al.*, 2010), particularly in their earlier developmental phases. Often communal lands are located in rural areas

without access to adequate infrastructure required for alternative wildlife based land use options making safari hunting a more attractive means of generating revenue (Lindsey *et al.*, 2006b; Wilkie and Carpenter, 1999). Hunting tourists are more willing to travel long distances and give up the luxuries associated with adequate infrastructure than most safari tourists are (Lindsey *et al.*, 2007, 2006a). Whilst being a lucrative tool for generating income, hunting can also play an important role as a managerial tool as it provides an efficient means of controlling animal populations (Loveridge *et al.*, 2006).

South Africa boasts one of the most successful game and hunting industries in Africa (Lindsey *et al.*, 2007). Yet, more that 90 percent of formal hunting takes place on private land (DeGeorges and Reilly, 2009) while livestock and small scale subsistence farming remain the main focus for development on communal lands (Chaminuka, 2013). The failure to initiate wildlife based enterprises on South Africa's communal lands might very well be attributed to the same reason which Dressler *et al.* (2010) describes as being the cause for the failure to implement successful CBNRM, which is – "the deeply entrenched mind set of fortress conservation".

If South Africa is to truly extend conservation efforts onto communal lands then it needs to look beyond the confines of fortress conservation and past the bureaucracy of current conservation practises. The inclusion of people into natural resource management projects which utilise wildlife and safari hunting could very well be one of the solutions to poverty alleviation, social upliftment and better conservation practises in South Africa. However, in order to explore this concept it is necessary to document and understand similar initiatives that were pursued in the past. Moreover, it is important that information is ascertained regarding the opinions and attitudes of the people who would be directly involved. Additionally, a better understanding of the various factors which could influence such people's attitudes is key to determining the level of support amongst rural South Africans.

A case to consider

The northern parts of the former Ciskei homeland, which now forms part of South Africa's Eastern Cape Province, are comprised of communally owned land referred to as tribal resource areas (Wotshela, 2004, 2003). One such tribal area is governed by the amaQwathi Tribal Authority under the leadership of the house of Hinana (Wotshela, 2004). In the early 1980's a game reserve known as Ntabethemba was established on the amaQwathi's tribal land (Andrew *et al.*, 2000). The aim was to create a wildlife-based community project which sought to provide benefits to the residents within the communal area (Andrew *et al.*, 2000). Paid safari hunting was seen as the primary means of deriving benefits for the project.

While the Ntabethemba Reserve is said to have operated for more than 25 years before failing, there is a considerable lack of documented information concerning its background, objectives or even the possible cause(s) for its failure. More recently, interest was expressed by a few of the local headmen and a number of the younger residents, for the re-development of the reserve. Thus it became vital to retrieve information on the projects in order to: a) examine the circumstances under which the project initially failed so as to provide insight for CBNRM projects attempting similar initiatives and b) to understand the attitudes of local residents towards CBNRM projects, specifically concerning why residents thought the previous project had failed and whether they felt there existed scope for another attempt to re-establish the reserve. Additionally, we strove to assess the attitudes of local residents towards hunting as a means of employment, income generation and rangeland conservation at Ntabethemba.

Aims and approach

The aim of this thesis was therefore twofold: firstly, to document and understand the happenings of a failed community owned hunting reserve in South Africa's Eastern Cape Province and secondly, to determine what level of support there would be amongst the local residents if the reserve was to be re-established.

The objectives of the thesis were aligned to fulfil the aims through approaching the situation from a social perspective. Qualitative data provided the baseline for establishing the objectives set to meet the first aim, while the theoretical framework put forward by Adjen and Fishbein's (1980) Theory of Reasoned Action (TRA) was used to unpack the objectives of the second aim.

In order to meet the first aim the following objectives were drawn: (a) unpack the background of the Ntabethemba Reserve, (b) understand the reasoning for its establishment, (c) ascertain the recollections, views and opinions of different stakeholder groups and (d) discuss the possible cause for its failure.

For the second aim, the objectives were as such: (a) gauge the resident's behavioural intentions towards supporting the possible re-establishment of the Ntabethemba Reserve, (b) determine what influence their feelings towards hunting and wildlife might have on their behavioural intentions, (c) understand the residents' attitudes towards other major issues relating to the reserve and (d) determine the influence which key societal groups would have on the residents support.

1.1. Brief Chapter Overview

The body of the thesis is presented in the form of individual manuscripts to be submitted for publication in peer-reviewed journals. Content and references might therefor overlap but will assist the reader to re-cap important ideas and focus points. The structure of the thesis is as follows:

Chapter 1: Introduction – Introduces the main argument put forward in the thesis, namely: why it is necessary to focus conservation efforts towards communal lands. How CBNRM projects that utilise wildlife and hunting as a land use practise, can assist with conservation and rangeland protection. In addition, the chapter delivers the main aims of the research as well as the approach and objectives that were used to reach them.

Chapter 2: Literature Review – Examines past research to provide a better understanding of the major issues dealt with in the thesis. Necessary background information, which would otherwise not appear in any of the other chapters, is ether provided or elaborated on in order to set the context of the thesis.

Chapter 3: The Ntabethemba Reserve – Provides the bulk of the information concerning the background of the Ntabethemba Reserve. Information presented here is mostly qualitative in nature and was collected through consultation with select stakeholder groups.

Chapter 4: Local Residents support for the re-establishment of the Ntabethemba Reserve – This chapter addresses the attitudes of local residents towards the re-establishment of a hunting reserve at Ntabethemba as a means to gauge their willingness to support such a venture. A theoretical framework (the theory of reasoned action) is used to determine the level of support amongst the residents with the results calculated through statistical analyses.

Chapter 5: Conclusion – This chapter provides a consolidated discussion of the previous chapters and provides an overview of key findings, a critique of the methodologies and recommendations as to the feasibility of pursuing the re-establishment of the Ntabethemba Reserve. It also provides scope for any further studies required in this field.

Appendix 1

The appendices include the interview schedule used for the interviews and informal discussions with the key stakeholders, as well as the questionnaire used in the house hold surveys.

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Chapter 2: Literature Review

2.1. Introduction

Desertification through rangeland degradation is considered one of the major environmental concerns of the world today (Le Houérou, 1996; Meadows and Hoffman, 2002; Millennium Ecosystem Assessment, 2005; Schlesinger *et al.*, 1990; Verstraete and Schwartz, 1991). The loss in productivity as a result of degraded rangeland places major constraints on the wellbeing of human populations (Ighodaro *et al.*, 2013; Millennium Ecosystem Assessment, 2005; Verstraete and Schwartz, 1991). Rural people who rely heavily, if not solely, on natural resources have the most to lose from a loss in land productivity yet they are often the ones who are least equipped to combat against it (Millennium Ecosystem Assessment, 2005). Furthermore, the threats imposed by desertification become amplified in the face of a changing climate coupled with that of a continuously rising human population (Cowie and Penman, 2011; UNCCD, 2014).

Land and resources which have poorly defined management systems run the greatest risk of being over exploited and degraded (Meadows and Hoffman, 2002; Ostrom, 2008). It is for this reason that communal tenure is often considered as being the most susceptible to degradation (Hoffman and Todd, 2000). In South Africa, concerns have been raised as to the state of the country's communal lands and towards the efforts that are being made to implement resource conservation on them (Bennett *et al.*, 2010; Boonzaier *et al.*, 1990; Vetter, 2013). Vetter (2013) highlights these concerns and advocates a policy shift which would allow for, in addition to others, an enhancement of multiple livelihoods on South Africa's communal lands. The author challenges the idea that privatisation and commercialisation of the commons are the only options for better resource conservation and argues against the notion that communal tenure *per se* is the cause of degradation.

In line with Vetter's (2013) argument, Chaminuka (2013) suggests that wildlife should be recognised as a land use option on South Africa's communal lands and that it could play a role in diversifying livelihood sources. Already, some of the land purchased by government as a result of the country's land reform program (see Kepe, Wynberg, & Ellis, 2003) is being utilised as a wildlife based enterprise aimed at benefiting rural communities (Ngubane and Brooks, 2013; Ngubane, 2012). MalaMala, a private game reserve to the west of Kruger National Park, which was owned by one of South Africa's wealthiest families, has become the most well know case of land reform (Tong, 2014). In this case the state is reported to have paid R70 000 per hectare for the game reserve which came to a total of R1 billion. This is the highest pay out yet in the land reform process (Joubert and Hofstatter, 2013; Tong, 2014). While the arguments against the country's land reform process are numerous a new wave of criticism aimed at its creation of community owned game reserves has emerged

(Ngubane and Brooks, 2013). The process of forming community owned game reserves has been described as being nothing more than efforts to maintain land under conservation – a form of 'green grabbing' (Ngubane and Brooks, 2013).

2.2. South Africa's Communal Lands

Communal tenure is one of South Africa's four property regimes - the others being; state property, private property and open access or non-property (Ainslie, 1999). Resources which fall under communal tenure are referred to as 'common property' or 'common pool' resources and have been described as having two key features (Becker and Ostrom, 1995; Bennett and Barrett, 2007). Firstly, the exclusion of such resources is difficult and costly and secondly, the utilisation of a resource inevitably results in the subtraction of its availability for others (Berkes *et al.*, 1989; Ostrom *et al.*, 1999). For South Africa's commonages, arable land is arguably the most important resource (Cousins, 2007).

The creation of South Africa's communal lands can be attributed to the institution of the Native Land Act (No. 27 of 1913), followed by the Native Trust and Land Act (No.18 of 1936) and later the Bantu Authorities Act (No. 68 of 1951) (Cousins, 2010). The Bantu Authorities Act (1951) in particular saw to the formation of the country's homelands which led to the relocation of large numbers of people onto somewhat marginal lands in the effort to segregate them from the rest of the country (Beinart, 2012). As a result, South Africa has been left with large communal areas which support high, often densely situated, populations (Ainslie, 1999; Bennett *et al.*, 2010).

South Africa's communal land is said to cover 13 percent (125 000 km^2) of the country's rangeland - a figure which originated from the known extent of the past homelands (Beinart, 2012) (Figure 2.1). While this figure is frequently cited (Adams, 2013; Krug, 2001; Scogings *et al.*, 1999; Vetter *et al.*, 2006) the actual present extent of land falling under communal tenure is uncertain (Adams, 2013). With the advent of the country's land reform policy large areas of land may have been placed into a state of communal tenure (Vetter, 2013). Conversely, some areas of land within the previous homelands now belong to the state, even though they are currently occupied by rural communities (Adams, 2013). Large areas of municipal commonage land, those areas on the periphery of many South African towns, have also been shown to act as communal land supporting high numbers of people and livestock (Atkinson, 2013). It is therefore challenging to confidently and clearly distinguish land held in communal tenure.

The 2001 census revealed that some 13 million (26%) South Africans, about 2.3 million households, are reliant on former homelands, or communal areas (Shackleton *et al.*, 2001; Vetter, 2013). Population densities in some of the more populated communal lands range from 30 to 100 persons per km^2 (Adams, 2013). A number of studies have shown that the residents of these communal areas rely a great deal on natural resources to supplement their income and livelihoods (Hunter *et al.*, 2013; Shackleton *et al.*, 2002; Shackleton and Shackleton, 2000). Furthermore, more than half of the countries livestock is said to occur on communal land (Ainslie, 2002a). As livestock is seen as the most important land use activity on South Africa's commons grazing lands it is then arguably the most important natural resource in these areas (Chaminuka, 2013; Vetter, 2013).

Figure 2.1: Location and extent of South Africa's former homelands within the country's current provincial boarders. (Source: http://egis.environment.gov.za/)

Ainslie, (2002b) estimated that the Eastern Cape's former homelands, namely the Transkei and Ciskei, alone account for more than 6 million head of livestock. The bulk of this number was made up of sheep (2.8 million) followed by goats (2 million) and cattle (1.7 million). Already in 1976 a report conducted by Trollope (1976) revealed that the majority of these commonages were heavily overstocked. Later, communal lands were pin pointed as being the main cause of land degradation in South Africa (Hoffman and Todd, 2000). However, Shackleton (1993) found that while the Ciskei

was considered heavily overstocked, in general, there was no cause for concern regarding land degradation. The author went on to highlight the benefits of communal tenure and supports the traditional approach of managing livestock. Shackleton's (1993) study however, related more to the southern mesic parts of the country which generally experience higher rainfall and are therefore dominated by sour veld grasses. While sour veld is capable of supporting high stocking rates, the areas in the northern parts of the Ciskei (north of the Winterberg Mountain Range) have a much lower rainfall and are therefore possibly far more susceptible to overgrazing (Forbes and Trollope, 1991).

Eastern Cape Communal Lands

South Africa's Eastern Cape Province encompasses two former homelands, namely the Ciskei and the Transkei, which combined covers an area of approximately 53 000 km^2 (Frankental and Sichone, 2005). Both these areas were considered as homelands for the Xhosa speaking people and were thus divided amongst varies Xhosa speaking tribes, such as the amaXhosa, abaThembu, amaMfengu, amaQwathi, amaMpondo, and the Mpondomisa (Peires, 2012). Due to various political situations, a few other non-Xhosa speaking tribes were also included into these homelands and were forced to live alongside that of the Xhosa speaking majority (Cobbett and Nakedi, 1988; Wotshela, 2009). Both the Transkei and Ciskei became self-governing, independent states in 1976 and 1981, respectively (Wotshela, 2004). The Transkei was governed by President Matanzima of the Thembu people while the Ciskei was governed by President Lennox Sebe, of the Rharhabe section of amaXhosa (Wotshela, 2004). In 1990 the Ciskei experienced a military coup d'état and was taken over by the African Democratic Movement (ADM) under the leadership of Brigadier Oupa Gqozo (Ainslie, 1999; Wotshela, 2009, 2004). In 1994, Oupa Gqozo was forced to step down when, under the new ANC (African National Congress) rule, the former homelands were disestablished and incorporated into the country's provincial boundaries (Beinart, 2012). Both the Ciskei and Transkei were included into the Eastern Cape Province.

2.3. Past research regarding the commons

The problems surrounding the management of resources which fall under communal tenure have been plaguing scientists and practitioners for decades and in consequence been thoroughly documented and debated. The essay written by Hardin (1968) describing, what he calls, the 'tragedy of the commons' can be considered one of the most prominent earliest publications which appeals to the issues of common property (Dietz, 2005). Hardin (1968) attempted to explain and rationalise why humans would denude the resources upon which they depend if such resources had no clearly defined ownership. Moreover, he emphasised the importance of addressing such an issue in the face of a

growing human population. Hardin (1968) argued that the solutions to the problem of managing communally owned resources would not be found in the advance of technology but rather through the development of adequate social and political systems. Furthermore, he warned against the manipulation of people's consciences through influencing their decisions with the use of moral propaganda suggesting that this would lead to an unfavourable state of anxiety.

Hardin's views have since then been criticized for being over simplistic and are suggested to relate more to resources which are held in 'open access' systems rather than that of communal ownership (Berkes *et al.*, 1989; Dietz *et al.*, 2003). The management of true communal resources are more complex (Allsopp, 2013). McCay (1996) recognised the complexity of the circumstances under which communal resources are held and described it in light of a 'comedy' rather than a 'tragedy'. Ostrom *et al.* (2002) then went on to establish the notion that the management of communal resources should rather be described in the sense of a 'drama' in that, in contrast to a 'tragedy', the 'drama of the commons' accounts for both positive and negative outcomes. These newfound views were based on studies which described areas where resources on communal lands were governed better than those on 'private' or 'state owned' lands (Bennett and Barrett, 2007; Ostrom *et al.*, 1999). The case of Mongolia's open plains, which are managed as group-property but are less degraded than those in neighbouring Russia and China, which are managed by the state, is one such example of successfully managed communal resources (Ostrom *et al.* 1999).

2.4. The need to Manage and conserve communal resources

Overgrazing and desertification have been exacerbated over the last two centuries due to growing population pressure and the consequent demand for land and resources (DeGeorges & Reilly, 2008). Additionally, in different local situations, issues such as changing land use leading to the compression of pastoralists into smaller areas, an increasing number, and expanding borders of protected areas have also intensified these problems (DeGeorges & Reilly, 2008).

In South Africa, resources held under communal tenure are being heavily denuded (Hoffman and Todd, 2000; Meadows and Hoffman, 2002; Vetter *et al.*, 2006). Such cases generally occur where adequate governance systems do not exist or have been disrupted leading to a state of uncontrolled resource usage. Overgrazing especially is considered a major problem as it is seen to be the leading factor in rangeland degradation which in turn catalyses the onset of desertification (Kassas, 1995; Schlesinger *et al.*, 1990). Overgrazing is primarily caused by the mismanagement of pastoral livestock in which animals are kept at unsustainably high numbers for long periods of time. A study commissioned by the South African Department of Environmental Affairs and Tourism (DEAT) in the late 1990's found the levels of overgrazing on communal lands to be exceedingly higher than on

privately owned commercial properties (Hoffman and Todd, 2010, 2000). Arid and semi-arid areas were in particular highlighted as a concern when it came to land degradation (Hoffman and Todd, 2010). Low rainfall and slow recovery rates of natural plant cover in arid and semi-arid areas increases the chance of erosion resulting in over utilisation of the vegetative ground cover leading to major losses in top soil with lasting negative impacts on the lands productivity (Hoffman and Todd, 2010).

An even greater concern is when rangeland degradation and desertification is seen to impact directly on the state of human wellbeing (Millennium Ecosystem Assessment, 2005; Verstraete and Schwartz, 1991). It is estimated that at the turn of the century more than two billion people occupied dry land areas, covering approximately 40% of the earth's land surface (Millennium Ecosystem Assessment, 2005). Of these, approximately 20-120 million people (1-6% of the global population) lived in areas under threat of desertification (Millennium Ecosystem Assessment, 2005). The concern imposed by desertification is amplified by the risk of a changing climate together with the continued rise in the human population.

Due to the continued threats of desertification the United Nations formulated the Convention to Combat Desertification (UNCCD) in 1994 (UNCCD, 2014). Having stemmed from the 1992 Rio Earth Summit, in which the principles for sustainable development were set out, the UNCCD along with the Convention on Biological Diversity (CBD) recognised the need for more inclusive approaches to conservation (Bocchino and Burroughs, 2013; Crane *et al.*, 2009). The goal of decentralising resource management and enabling the participation of local stewards in conservation actions was set out.

2.5. The rise of Community Based Conservation

Community based conservation (CBC) initiatives arose as a resolution to the failures of centralised, state run systems of conserving communal rangelands (Dressler *et al.*, 2010; Hutton *et al.*, 2005; Mulrennan *et al.*, 2012). The objectives were to create incentives by which local residents would gain from conserving natural resources (Child, 1993; Dressler *et al.*, 2010; Jones and Murphree, 2004). This human orientated approach to conservation was seen as a major contrast to the traditional views of protection of natural areas (Dressler *et al.*, 2010).

The traditional view, with its' emphasis on protectionism, was prevalent during the late colonial era where the creation of protected areas or parks was seen as the best way forward for conservation (Jones and Murphree, 2004). Protectionism is based on the principal that in order to conserve nature it is necessary to exclude humans from it. In the literature the process of protectionism is often referred to as 'fortress conservation' (Bocchino and Burroughs, 2013; Büscher and Dietz, 2005; Jones and Murphree, 2004; Murphree, 2002). Fundamentally fortress conservation is a biocentric approach to nature conservation which places more importance on the lives of charismatic wildlife than that of the indigenous people who either rely on wildlife as a resource or who are in conflict with them over space (Jones and Murphree, 2004). The development of parks throughout Africa during the 1950's and 1960's that saw to the displacement of large numbers of indigenous peoples, stands as testimonial to the process of fortress conservation (Büscher and Dietz, 2005).

The concept of CBC, commonly referred to as Community Based Natural Resource Management (CBNRM), was developed in the 1970's but became popular in the 1980's-90's (DeGeorges and Reilly, 2009; Dressler *et al.*, 2010; Hutton *et al.*, 2005). It stemmed from the notion, which arose with the conservation movement of the 1960's, that local people should be incorporated into conservation areas rather than excluded from them (Hutton *et al.*, 2005). The similar concept of Integrated Conservation Development Projects (ICDP) was established in parallel to CBC but with more of a focus on 'sustainable development', such that resource conservation could be achieved simultaneously to the upliftment of rural, poverty-stricken people (Campbell and Vainio-Mattila, 2003). However, ICDPs have been heavily criticised for their lack of success, mainly due to poor design and/or implementation (Brandon and Wells, 1992; Ferraro and Kiss, 2002). Another view is that in most ICDPs there is a breakdown in the link between the benefits derived from a project and actual conservation actions (Brandon and Wells, 1992; Rao and Ginsberg, 2010). The result being, that whilst accepting the benefits from a project, local residents ignore the imposed conservative approach to resource utilisation (Brandon and Wells, 1992).

CBNRM differs from ICDPs in that it aims, in theory, to incorporate local communities directly into resource conservation by involving them in a project rather than having it bestowed upon them (Campbell and Vainio-Mattila, 2003). Consequently CBNRM not only uplifts communities but empowers them. Empowerment enables people to recognise the link between benefits and good conservation practises (Dressler *et al.*, 2010). By incorporating the 'local stewardship' approach to natural resource management, CBNRM aimed to address the global plea to rectify the human cost to conservation.

A starting point of CBNRM in Africa was the development of the Communal Areas Management Programme for Indigenous Resources (CAMPFIRE) in Zimbabwe (Child and Barnes, 2010; Turner, 2004). CAMPFIRE was started in the 1980's and soon became one of the flagships of CBNRM (Dressler *et al.*, 2010; Taylor, 2009). By utilising wildlife, both through consumptive (meat and hunting) and non-consumptive (photographic safaris) approaches, CAMPFIRE was able to promote the conservation of wildlife on communal lands and simultaneously generate benefits for the local residents (Child, 1993; Taylor, 2009). Residents were willing to bear the costs associated with living with wild animals once they were able to receive tangible benefits from them (Child, 1996).While the principal aim of CAMPFIRE was to ensure the protection of wildlife on communal lands, a secondary objective was to endorse the conservation of key habitats on which wildlife relied (Child, 1993). In so doing the programme was able to successfully implement species conservation as well as promote the upkeep of landscapes, biodiversity and a wealth of ecosystem services.

The popularity of CBNRM grew rapidly amongst southern African countries, such as Botswana, Namibia and Zambia (Dressler *et al.*, 2010). These countries now have their own versions of local stewardship conservation initiatives similar to CAMPFIRE and have integrated CBNRM into their wildlife and land use policies (DeGeorges and Reilly, 2009). More recently, CBNRM initiatives have been developed in other African countries such as Tanzania, Cameroon and Uganda (Hartter and Ryan, 2010; Nelson and Agrawal, 2008; Stiles, 2011).

While the successes of CBNRM in Africa were prominent in earlier literature (Brandon and Wells, 1992; Lynch and Talbott, 1995; Wainwright and Wehrmeyer, 1998) the last decade has seen a shift in viewpoints as authors have begun to criticize its shortcomings (Alexander and Mcgregor, 2000; Mulrennan *et al.*, 2012; S. Turner, 2004). A number of papers have reviewed the state of CBNRM programs over the past few decades and have come to the conclusion that there are problems in most countries and the programmes have not necessarily achieved what they set out to do (DeGeorges and Reilly, 2009; Ferraro and Kiss, 2002). DeGeorges and Reilly (2009) discuss a number of the key problems associated with CBNRM efforts in sub Saharan Africa. Their review focuses on the economic inadequacies within the programmes and highlights issues related to the top down approach

of distributing benefits. For example, CBNRM programmes which utilise safari hunting initiatives often experience minimal benefits at a household level as large percentages of the profits are taken up by government or by the private outfitter companies (DeGeorges & Reilly, 2009). Additional problems faced by CBNRM programmes are further discussed by the authors and, among several others, include; (1) the lack of empowerment for local residents, (2) the failure to integrate the needs, policies and priorities of the varies stakeholder groups, (3) the breakdown or bypassing of traditional institutions, (4) a lack of appropriate feedback and monitoring systems needed to correctly allocate off takes, and (5) the heavy reliance on international donor organisations (DeGeorges & Reilly 2009). For an extensive review of these issues see DeGeorges & Reilly (2008). Similarly, Dressler *et al.*, (2010) found problems relating to the ideology, bureaucracy and assumptions made by those who initiate and facilitate CBNRM programmes. Often the ideals which the facilitating group has, such as biodiversity conservation, are prioritized over the needs of the local residents (Dressler *et al.* 2010). The issues discussed by DeGeorges and Reily (2009) and Dressler *et al.* (2010) highlight the problems which threaten the sustainability of CBNRM programmes or undermine the initial goal of finding an equitable solution to combining poverty reduction within resource conservation.

This being said, few other viable options remain to resource conservation on Africa's commons. CBNRM, provided it is implemented correctly, still has a lot of potential and scope. A paper by Turner (2004), presented at the International Association for the Study of Common Property (IASCP) conference in Mexico, argued that while problems with CBNRM might very well be occurring, the programme is still key in addressing the issues of the commons. Murphree (2009) went further in stating that CBNRM "…is the only viable option for an effective human stewardship of most of Africa's landscape."

2.6. Using hunting to develop CBC in Africa

A common element to CBNRM initiatives in southern Africa is the use of wildlife as a resource (Child and Barnes, 2010; Fisher and Bickel, 2009). While the majority of larger projects have opted for the non-consumptive approach to utilising wildlife, smaller more remotely located projects rely on other means such as paid safari hunting or sport hunting (Baker, 1997; Child *et al.*, 2012; Lindsey *et al.*, 2006a, 2006b; Loveridge *et al.*, 2006).

Hunting has played a part in Africa's history from the time of the early hunter gathers, through the rise of chiefdoms and civilization, up to present day safari hunting (MacKenzie, 1988; Steinhart, 1989). Literature concerning hunting on the continent came about with the onset of the arrival of Europeans who documented numerous stories of intrepid hunting trips where vast amounts of game were bagged (Beinart, 1990; MacKenzie, 1988). While game numbers today are probably not as high

as they were, hunting still remains an important aspect of life in Africa, undertaken by both locals and foreigners alike (Lindsey *et al.*, 2006b; Mayaka *et al.*, 2005; Wilkie and Carpenter, 1999).

The Oxford English dictionary defines hunting as the action of the verb 'hunt', which is defined as "to pursue and kill (a wild animal) for sport or food". This broad classification does not take into account 'commercial hunting', also referred to as 'market hunting', which according to Loveridge *et al.* (2006), is one of three common categories of hunting. The other two being; subsistence and sport (recreational) hunting (Loveridge *et al.*, 2006).

Unlike other tourists, hunters are willing to travel long distances, stay in basic accommodation facilities and pay high prices in order to pursue their sport (Baker, 1997; Lindsey *et al.*, 2006a). Added benefits often include large gratuities and a good supply of meat at the end of a safari. These factors have made sport hunting a viable means of generating benefits for CBNRM projects (Lindsey *et al.*, 2007, 2006a).

Some of the problems identified with using hunting as an income source for CBNRM programs are: (1) the distribution of income amongst households. It has been found that only a small portion of income generated from hunting actually ends up at the household level (DeGeorges and Reilly, 2009). This is mainly due to the 'top-down' approach of benefit distribution, where large percentages of income are taken up by government, in the form of permits, taxes and levies, as well as by the private safari outfitter who organises, facilitates and markets the hunt (DeGeorges and Reilly, 2009). (2) The empowerment of local residents (DeGeorges and Reilly, 2009). The low level of education amongst rural residents targeted by CBNRM, means that individuals are often incapable of adopting skilled positions within programmes. This has led to a heavy reliance on skilled professionals from outside the community, such as private safari outfitters, while residents are left with low level positions (DeGeorges and Reilly, 2009). Residents are therefore not included in any major decision making processes. (3) The availability of jobs. Compared to alternative options of capitalising on natural resources, such as upmarket ecotourism ventures, safari hunting only provides a relatively small number of jobs (DeGeorges and Reilly, 2009).

None the less, sport hunting remains a common component of CBNRM projects, especially those in southern African countries (Lindsey *et al.*, 2007). Namibia uses trophy hunting as a source of revenue in a number of its' communal conservancies, which form the backbone of the country's CBNRM programme (Barnes *et al.*, 2001). A review of Namibia's communal conservancies in 2010 revealed

that 56% of communal conservancies received benefits from trophy hunting (NACSO, 2011). The value of these benefits amounted to just over N$13.9 million (US$ 1.9 million[2]), of which N$11 million (US$ 1.5 million) came from cash income and N$2.8 million (US$ 400 000) was the value of distributed meat (NACSO, 2011).

Zimbabwe's CAMPFIRE programme has been able to continue operating with the aid of income generated from international hunters despite the country's political turmoil and economic collapse (Jones, 2009; Murphree, 2009). In Botswana, a 1999 estimate of the income generated by the safari hunting industry indicated that approximately P 7.7 million (US$ 1.7 million[3]) was allocated to rural communities as benefits (DeGeorges and Reilly, 2009). Other African countries, such as: Zambia (Marks, 2001), Mozambique (Lindsey *et al.*, 2007), Uganda (Emerton, 1999) and Cameroon (Mayaka *et al.*, 2005), use sport hunting to some extent to benefit local residents on communal lands. South Africa on the other hand, whilst boasting a successful hunting industry, has been slow to capitalise on hunting as a land use option for communal lands.

2.7. South Africa's Hunting Industry

South Africa's hunting industry is arguably the largest and most successful in Africa (Lindsey *et al.*, 2007). In 2005 the industry earned an estimated income of just over R 2.7 billion (Cloete *et al.*, 2007) and then reached an all-time high of almost R6 billion in 2009/2010 (van der Merwe, 2014). This success can mostly be attributed to the private sector, as the majority of hunting in the country takes place on private lands, unlike other Southern African countries where hunting is largely done on state or communal lands (Lindsey *et al.*, 2007).

According to literature the hunting industry in South Africa is split into two forms: local meat hunters or 'biltong hunters'[4] and international hunters or 'trophy hunters'(Dickson *et al.*, 2009; van der Merwe, 2014). However, in the past the industry was always seen as being made up of four groups; (1) trophy hunters, (2) biltong hunters, (3) bird hunters or wing shooters (use mainly shotguns), and (4) bow hunters (for either trophy or biltong and with mainly bow and arrow of various types) (van der Merwe and Saayman, 2005). Green hunting (see Greyling *et al.*, 2004) and fishing is also sometimes considered as part of the hunting industry (van der Merwe and Saayman, 2005). In effect

[2] 2010 exchange rate of N$7.33 to the US$ (Bank of Namibia, 2011)

[3] 1999 exchange rate of Pula 0.22 to the US$ (Bank of Botswana, 2000)

[4] Biltong - A dried meat traditional made from beef or game. The name is derived from the Dutch word "bil" meaning buttock and "tong" meaning strip (van Schalkwyk *et al.*, 2010).

it is not always simple or even possible to place a hunter into one of these clearly defined categories. For example, an international hunter who wishes to hunt an animal irrespective of the size of its horns is classified as a trophy hunter and a local hunter who goes out looking for a trophy animal and is not concerned about the meat is still classified as a 'biltong hunter'.

The legislation that governs hunting in South Africa falls under the National Environmental Management Act (No. 107 0f 1998) (NEMA), the National Environmental Management Biodiversity Act (No 10 of 2004) (NEMBA), provincial hunting ordinances as well as the Threatened or Protected Species Regulations (No. R. 152 of 2007) (TOPS). In legislation the act of hunting is defined as:

> *"in relation to a wild animal; to kill, or attempt to kill, such wild animal by any means, method or device whatsoever; to search for, lie in wait for, drive, pursue, or to discharge any missile at, such wild animal with the intent to kill; to lure by any means, method or device whatsoever, such wild animal with the intent to kill; or to shoot at such animal, whether or not with the intent to kill."*

Furthermore, most hunting associations have adopted a code of conduct based upon fair chase principals. Continentally, the code of ethical sport hunting conduct for Africa was developed by the African advisory Board and in South Africa SA Jagters, CHASA and PHASA have developed similar guidelines.

The advantages of South Africa's hunting industry is the extensive range of choice offered in terms of species that may be hunted, different hunting environments and landscapes, methods of hunting, and price of the hunting trip (Damm, 2005). South Africa offers approximately 60 different species of game for hunting, which include six species of antelope that are endemic to the country (Barnett and Patterson, 2006; Damm, 2005). It is one of only two countries that offer hunting permits for all species of the big five (Lindsey *et al.*, 2007; Patterson and Khosa, 2005). The diversity of vegetation biomes (Mucina and Rutherford, 2006) and topography in the country allows for a variety of hunting terrains. While the country has a legal hunting season for each game species, properties which have the required legal certification and are appropriately enclosed by a game fence are exempted from this hunting season (Burgener *et al.*, 2005).

While the availability of reliable data pertaining to South Africa's hunting industry has always been a problem, the rise of independent wildlife and hunting associations such as the Professional Hunters Association of South Africa (PHASA), Confederation of Hunters Associations of South Africa (CHASA), South African Wildlife Management Association (SAWMA) and Wildlife Ranching South Africa (WRSA) has led to an increase of documentation of hunting statistics. There is still however a major need for research into the hunting industry in South Africa, not only to allow for the development of more efficient and effective policies and legislation but to provide a better

understanding of the economic and marketing data which will strengthen the industry as a whole (van der Merwe, 2014).

2.8. Community Based Conservation in South Africa

South Africa has been slow in adopting the approach of CBNRM (Dressler *et al.*, 2010). While it was quick to include its' ethos into the country's policy, after the advent of democracy in 1994, (Dressler *et al.*, 2010) little has been done to put it into practise (Cocks *et al.*, 2001; Dressler and Büscher, 2008). The few successes in South Africa's attempt to initiate CBNRM are often highlighted in the literature – the Makuleke claim in Kruger (Steenkamp and Uhr, 2000; R. Turner, 2004), the Nama community in the Richtersveld National Park (Hendricks *et al.*, 2004; Tong, 2014), the !Khomani San/Mure claim to the Kalahari Gemsbok Park (Isaacs and Mohamed, 2000; Robins, 2000) - however these have been criticised as not being true CBNRM initiatives but rather a means of settling land claims posed by these communities (Kepe, 2004). Often referred to as 'joint-management' or 'co-management' schemes these types of CBRNM initiatives generally result in a unequal negotiation between the communities the Parks authorities, who generally have the upper hand in terms of political power and financial backing (Colchester, 2003, in DeGeorges & Reilly 2008). Similar are the cases of the Mkambati and Dwesa-Cwebe communities in the Eastern Cape (Kepe, 2008, 2004).

The Pilanesberg and Madikwe Reserves in the North West province are two of which started as community upliftment projects without the advent of a land claim to a protected area (Carruthers, 2011; Davies, 2000; Magome and Grossman, 2000). Both these reserves were developed on communal land as wildlife-based enterprises with the purpose of creating opportunities for the local residents who live in the areas (Carruthers, 2011; Davies, 2000; Magome and Grossman, 2000). An interesting note is that in their early development stages both reserves utilised trophy hunting as a means of generating an income. It was only after they became successful ecotourism ventures that hunting was stopped, as it was thought that the two activities interfered with each other (Carruthers, 2011; Davies, 2000).

2.9. Sub Conclusion

There is much debate as to the success of CBNRM programs in protecting natural resources on communally owned lands, however there remains no tangible alternative if we are to succeed in expanding the boundaries of conservation. There is no doubt that as the population and economy of Africa grows, increasing pressure will be placed on its indigenous natural resources. If these resources are to be conserved then it is crucial that there is buy in from local residents. An effective means of doing so is to eliminate the costs of conservation with benefits derived from the natural resources themselves. Safari hunting can therefore play an important role as an initial source of generating benefits from wildlife resources. However, hunting is by no means the sole answer to the problem. While it can create some benefits for the surrounding residents the majority of the profits, as with all capital ventures, lies with those who take the biggest risk and in this case it is the private, outside, investors. The main problem is that the total risk which local residents take, in the form of the true opportunity costs of giving up land and resources, is not weighted appropriately alongside investors' hard cash. In order to effectively utilise safari hunting on communal lands in South Africa, conservation ventures need to be coupled together with additional programs that can equip and empower local residents so as to enable them to take on the operation entirely. Such practises are far easier to put forward on paper but in reality are confused by various other factors typical of a complex system.

2.10. References

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Chapter 3: The Ntabethemba Reserve

3.1. Introduction

In past decades, conservation mind-sets regarding the control of natural resource usage have shifted from protectionist, referred to as fortress conservation, towards a more holistic approach (Büscher and Dietz, 2005; Jones and Murphree, 2004). Fortress conservation focused primarily on the intrinsic value of nature and saw humans as being separate from it (Jones and Murphree, 2004; Murphree, 2002). It was therefore seen that in order to preserve nature it was necessary to have humans excluded from it (Murphree, 2002). Alternately, the holistic approach sees humans as a part of nature and recognises the utilitarian value of natural resources (Jones and Murphree, 2004). This shift away from what is essentially a biocentric view towards a more anthropogenic one (Jones and Murphree, 2004), has led to an increased need for understanding the social aspects of nature conservation (Evely *et al.*, 2008). In turn it has meant that conservation scientists and practitioners are required to transcend cognitive as well as philosophical boundaries to fully comprehend and address the issues demanded from, what has now come to be recognised as, a complex system (Allsopp, 2013; Peterson *et al.*, 2010). Thus successful modern conservation extends the boundaries of research and practise through adopting multidisciplinary, interdisciplinary and transdisciplinary approaches (Margles *et al.*, 2010; Peterson *et al.*, 2010; Sodhi and Ehrlich, 2010).

The advantages of conservation areas which benefit local inhabitants have been recognised by South African conservationists and government. Nonetheless, progress has been slow to alter the deeply entrenched mind-set of fortress conservation in the country (Bocchino and Burroughs, 2013; Dressler *et al.*, 2010). A handful of success cases exist where local indigenous people who were previously evicted from protected areas are now being able to benefit from them, through 'joint management' and 'outreach' programs (Isaacs and Mohamed, 2000; Reid, 2001; Walker, 2008). The settlement of 'land claims' such as these, which were facilitated through the country's land reform program, have recently been criticised by social anthropologists as being part of a neo-liberalisation process in conservation (Büscher and Dressler, 2012) and been described as 'green grabbing' (Ngubane and Brooks, 2013; Snijders, 2012).

Cases where South African community conservation initiatives have been orchestrated through land reform programs are well publicised and therefore constitute the bulk of literature (Kepe, 2004; Kepe *et al.*, 2005). The most prominent examples are that of: the !Khomani San community's claim in the Kalahari Gemsbok Park (Isaacs and Mohamed, 2000; Robins, 2000), the Nama people in the Richtersveld National Park (Hendricks *et al.*, 2004; Tong, 2014) and the famous Makuleke community's claim in Kruger National Park (Steenkamp and Uhr, 2000; Turner, 2004). The debate

continues on how successful on-going initiatives such as these have been. However, community conservation initiatives which have failed and been discontinued are not as well documented as they tend to slip through the cracks of governmental reports. One such example is the Ntabethemba Reserve, in the Eastern Cape Province.

The Ntabethemba Reserve, approximately 3000 hectares, was located in the northern parts of the former Ciskei homeland (Figure 3.1). It was run as a joint management project between the amaQwathi Community under the leadership of the linage of the house of Hinana and the neighbouring Tsolwana Nature Reserve (Andrew *et al.*, 2000; Strategic Management Plan, 2006). By utilizing safari hunting as a means of generating revenue, the reserve aimed to provide socio economic opportunities for the residents of the amaQwathi community whilst simultaneously conserving a large piece of open rangeland. Today the once successful Ntabethemba Reserve is completely disbanded, yet little is known about why this occurred. The background of the community reserve, its establishment and how it operated are all poorly documented. Information pertaining to the area and its history has been lost, as is the case with most records and documentation from the Ciskei (Morrow and Wotshela, 2005). Those documents, files and records which are known to still be in existence are difficult to locate (Morrow and Wotshela, 2005).

The importance of documenting such a case study is evident in that it provides a perspective of community conservation initiatives prior to the advent of South Africa's land reform program. Moreover, if any future community conservation projects are to be initiated in the area, or with similar attributes, then it is imperative that this case is documented to highlight possible pit-falls.

The aim of this study was therefore to document the history, objectives of the Ntabethemba Reserve and explore the possible causes of its failure. The main objectives were to discover the recollections, views and opinions of members of the different stakeholder groups. In so doing, the study aims to highlight features of a community owned hunting reserve in one of South Africa's former homelands.

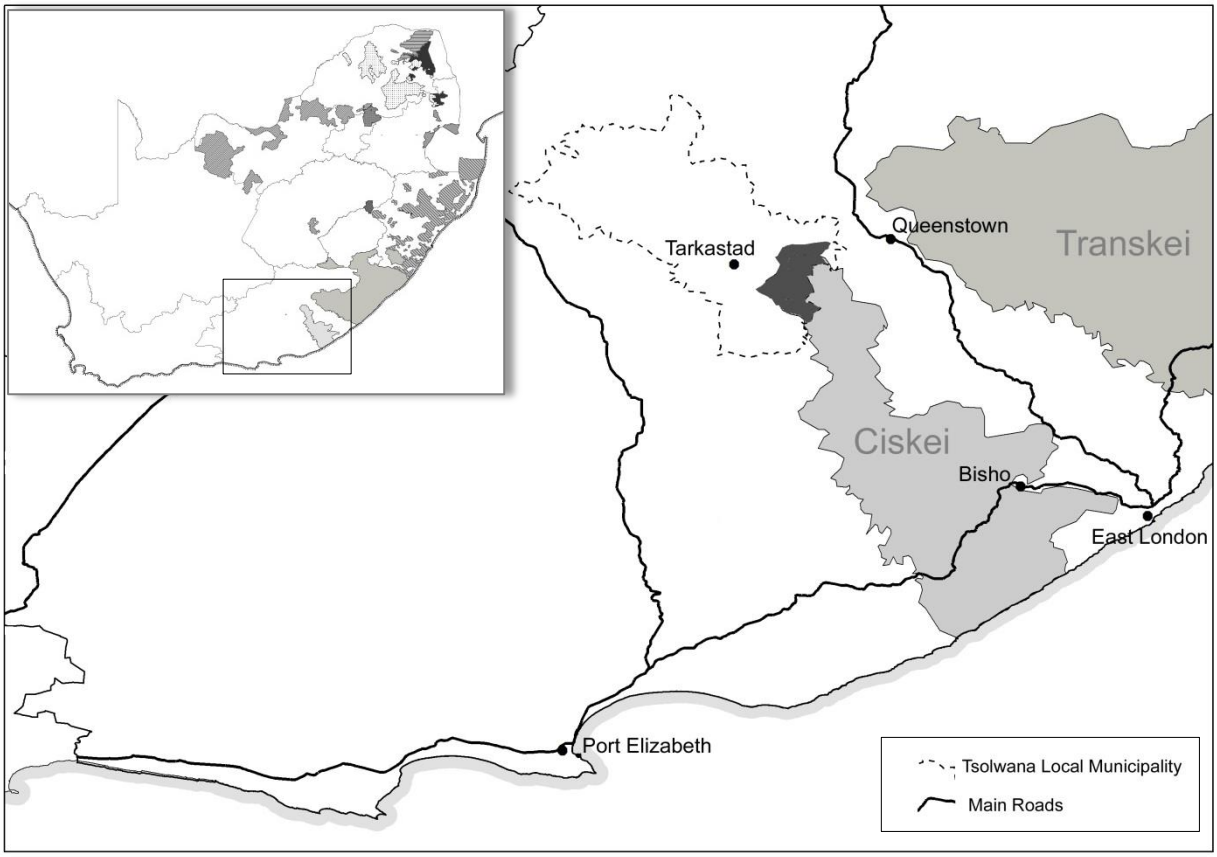

Figure 3.1: Location of the Ntabethemba District (Northern Ciskei) within the current boundary of the Tsolwana Local Municipality. (Source: http://egis.environment.gov.za/)

3.2. Methodology

The procedures used for this study were not those used in the traditional positivism approach where quantitative data is collected and analysed, but rather tended towards a more qualitative approach of data collection. The problem was addressed by deciphering history through piecing together what information was available from participants, published and unpublished sources. Reports and financial statements for the Ntabethemba Reserve were difficult to access and as such were not used in this study.

3.2.1. Study Area

The research for this part of the study took place in a number of locations within South Africa's Eastern Cape province (including: the city of East London, the towns of Queenstown and Tarkastad, and the Winterberg farming district), but was mainly focused within the area known as the Hinana

tribal resource area in which the Ntabethemba Reserve is located (Figure 3.2). This area formed part of the northern section of the former Ciskei homeland but today falls within the Tsolwana local municipality, which forms part of the Chris Hani district municipality. The tribal area is located approximately 13km south-east of the town of Tarkastad and 38km to the south-west of Queenstown. It is bordered, to the south, by a provincial protected area known as Tsolwana Nature Reserve, which falls under the jurisdiction of the Eastern Cape Parks and Tourism Agency (ECPTA). On the south-western and north-western boundaries of the Hinana tribal resource area lies privately owned farmland. These private properties are largely run as livestock farms (mostly cattle and sheep), with the exception of a private hunting reserve, which borders marginally onto the tribal area (but is mostly buffered by the Tsolwana Nature Reserve) at the southernmost tip.

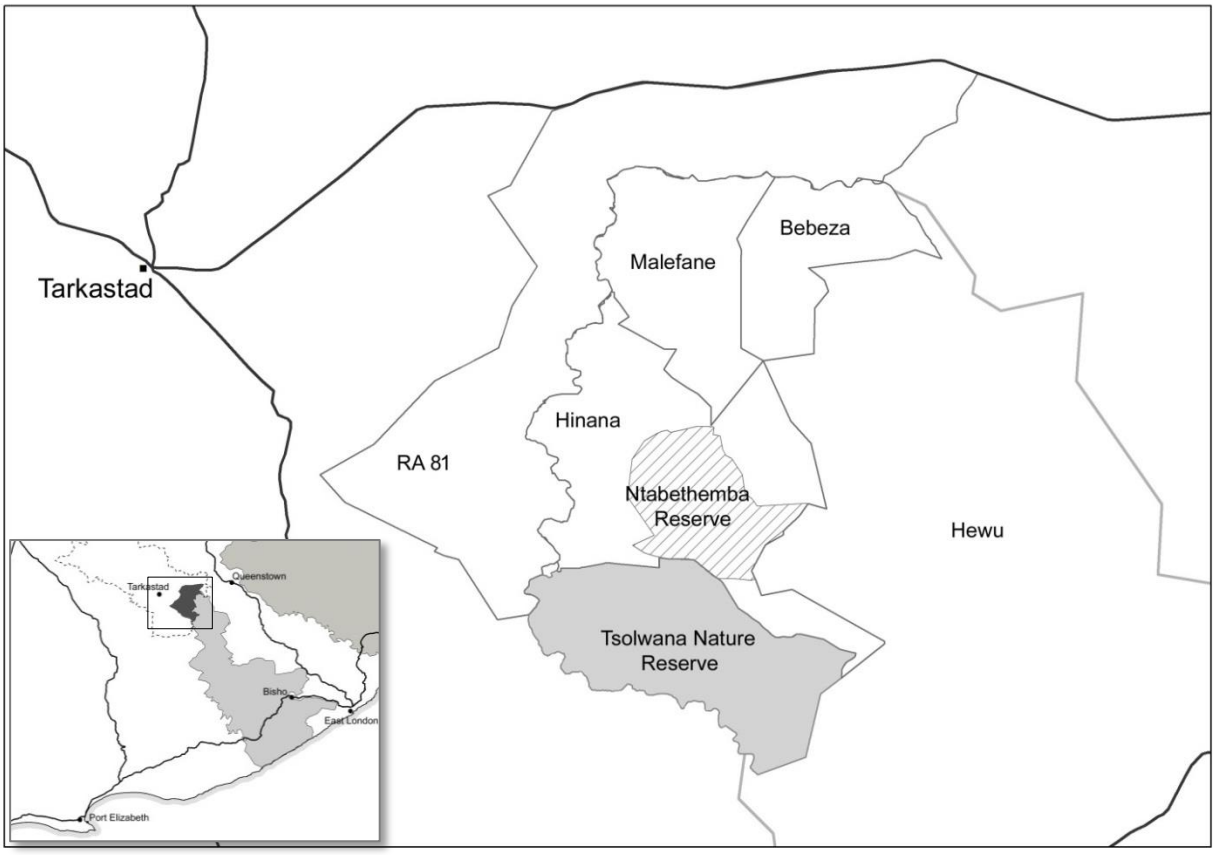

Figure 3.2: The Northern Ciskei showing the boundaries of the Tribal Resource Areas: Hewu - under Zulukama Tribal Authority, Bebeza – under amaVundla Tribal Authority, Malefana – under Basoth Tribal Authority, and Hinana – under amaQwathi Tribal Authority (Source: Derived from Wotshela 2004)

There are six separate settlements within the Hinana tribal resource area– Beccles Farm, Khayalethu, Tentergate, Spring Grove, Thembalethu and (also named Phelindaba) (Figure 3.3). These settlements are structured in a semi-urban style, with each house being situated on a square plot of land (some

with boundary fences). The main form of housing in the area is that which is supplied through South Africa's Reconstruction and Development Programme (RDP) (Figure 3.4). The majority of the houses have access to electricity and most residents have access to running water – distributed via subterranean pipelines with taps located at key road intersections. There is generally one tap for every 16 plots dependent on the settlement. The main water supply for the area is from boreholes which feed into large holding tanks positioned in high lying areas. Some of the settlements collect water from the Swartkei River, which meanders through the tribal lands. A few (Earth) holding dams have been built along one of the tributaries which flow into the Swartkei River. These dams are mainly used to supply water to small scale irrigation schemes which allow for the cultivation of lands along the stretch of the tributary. Spinach, maize, potatoes and pumpkins form the bulk of the cultivated crops. Only a few of these cultivated lands, mainly those between Khayalethu and Tentergate, remain in use.

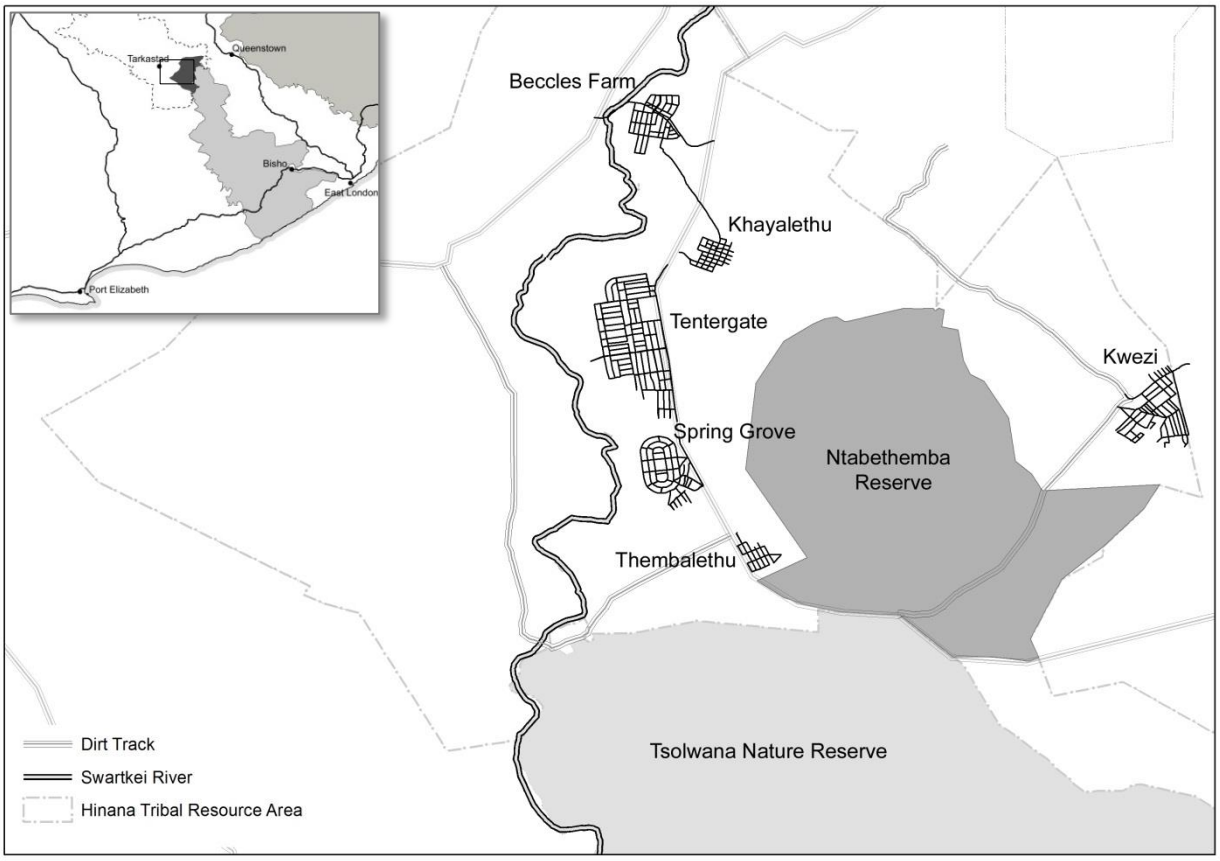

Figure 3.3: The six separate settlements within the Hinana Tribal Resource Area.

The main land use practise in the tribal resource area is that of free ranging livestock farming. A 2010 veterinary inspection census revealed a stocking rate of approximately 0.67 Live Stock Unit (LSU) equivalents per hectare for the tribal resource area (Rutherford and Powrie, 2011). The potential carrying capacity of the area reported by the National Department of Agriculture is between 0.07 and 0.11 LSU per hectare (AGIS 2007). A census conducted by Rutherford and Powries (2011), which was confined to the southern parts of the tribal resource area, revealed that sheep were the most abundant livestock species followed by goats and then cattle.

Figure 3.4: Typical house provided by the Reconstruction and Development Programme (Photo taken by Author).

3.2.2. Data Collection

Primary data collection was undertaken during the months of January to March 2013. The use of semi structured interviews, informal discussions and focused group meetings were used to illicit information from key participants within the varies stakeholder groups (Table 3-1). Due to high tensions and mistrust surrounding the Ntabethemba Reserve together with ethical principles upheld by the study all participants were kept anonymous. The majority of the interviews were conducted in English with some group discussions in Xhosa. The researcher was familiar with the local Xhosa

dialect and was able to follow any discussions. Participants were chosen on the basis of their involvement (both direct and indirect) with the reserve, their knowledge about it and/or their understanding of the societal structure within the surrounding villages (Table 3-1). Semi-structured interviews were conducted with individual participants, however, in some cases interviews were conducted with more than one informant at the same time – as was the case with the Youth Committee and the Royal Family. If a situation did not allow for a formal interview, then informal discussions were conducted – as was the case with the representatives from the Department of Economic Development and Environmental Affairs (DEDEA) and two of the Hunting Outfitters. In such situations notes were taken at the soonest available time subsequent to the discussion. Follow up discussions with participants were sometimes held after they had already been interviewed - such was the case with: the Royal Family, the Youth Committee, ECPTA representatives, Hunting Outfitters and the Conservation Biologist. A number of meetings and local tribal functions were attended during the course of the three months (Table 3-2). This allowed for observations to be made regarding the interactions between varies stakeholder groups.

Table 3-1: The number of interviewed participants from the different stakeholder groups which were involved in (or had knowledge about) the Ntabethemba Reserve as well as the number of interviews and discussion conducted.

Stakeholder Group	**Participants**	**Semi-Structured Interviews**	**Informal Discussions**
amaQwathi Tradition Council	2	2	0
Village Headmen	6	6	0
Royal Family of the House Hinana	3	1	3
amaQwathi Youth Committee	4	1	2
Government Appointed Ward Council	1	1	0
Eastern Cape Parks and Tourism Agency (ECPTA)	4	4	1
Department of Economic Development and Environmental Affairs (DEDEA)	2	0	2
Safari Hunting Outfitters	3	1	3
Scientific Community: Conservation Biologist	1	1	1
TOTAL:	**26**	**17**	**12**

Information which participants gave pertaining to specific details of the Ntabethemba Reserve and the Lilly Fountain Lodge was weighed up against their involvement with the reserve. An example being; the information of game species which were stocked on the reserve would be more accurate coming

from those who actually worked on the reserves as opposed to those who viewed it from the other side of the fence.

The empirical findings of this study were backed by secondary data collected from published and unpublished literature. This in turn provided the background and history of the social, political and geographical settings of the area.

Table 3-2: The meetings and functions attended during the course of the study where by stakeholder interactions could be observed.

Description	Attendance
Meeting – Service delivery	- Traditional Council - Representatives of the Royal Family - Government Appointed Ward Council
Traditional Ceremony (umgidi) – coming of age ceremony for boys belonging to the house of Hinana	- Members of the amaQwathi Royal Family and decedents from the house of Hinana
Meeting – held to get approval to conduct household surveys within the TRA	- Representatives of the Royal Family - Representatives of the Traditional Council
Meeting – held with the amaQwathi Youth Committee	- amaQwathi Youth Committee
amaQwathi Youth Day Presentation	- Pupils and teachers from varies schools within the TRA - The amaQwathi Youth Committee - Representatives of the DEDEA - Representative of ECPTA
Meeting – held to discuss the response of the youth to the proposal of redeveloping Lily Fountain Lodge	- amaQwathi Youth Committee - Royal Family
Meeting – held to discuss the future of the Ntabethemba Reserve & Lily Fountain Lodge	- Representatives of the Royal Family - Representative of DEDEA

3.2.1. Ethics

Ethical clearance to undergo this study was granted by Stellenbosch University under the reference: DESC_Gird2012. A study proposal was sent to the relevant representative of Eastern Cape Parks to inform them of the on-going research. Meetings were held with the key representatives of the amaQwathi Royal family in order to obtain permission to do research on amaQwathi land and within the community. Signed, written permission was received from the secretary of the amaQwathi Royal family. Written permission was then obtained from each headman of the six villages in the study area to conduct household surveys within their village.

3.3. Results

The results of this study are displayed under key headings starting with: the history of the area and its people, the background of the project, how it operated and the problems it faced.

3.3.1. History of the Area

The History of the Northern Ciskei

The formation of the northern Ciskei, as with other homelands, suffered from a number of political and logistical complexities and was the cause of a great deal of social injustices and discriminations. A result of which caused a large number of its inhabitants to be left marginalized in areas with little to no opportunity for economic growth or upliftment.

In 1913 the South African government instituted the Native Land Act (No. 27 of 1913) which, together with the Native Trust and Land Act (No.18 of 1936), formed the bases for politicised segregation within the country (Cousins, 2007; Wotshela, 2004). This was achieved through the strengthening of the country's reserve system, which had been set up to facilitate the control of indigenous Africans as well as ensure a cheap supply of labour in certain areas (Cousins, 2007). Later, the advent of the 'homeland' or 'bantustan' policy, which came about through the Bantu Authorities Act of 1951, led to the consolidation of these 'reserves' (Beinart, 2012). Consolidated areas were referred to as 'homelands' or 'Bantustans' (Beinart, 2012). Homelands were generally seen as self-governing territories and separate from South African provinces. Some even became independent states (Beinart, 2012; Wotshela, 2004).

The Ciskei was one such homeland. It became a self-governing territory, under the governance of Lennox Sebe's Ciskei National Independence Party (CNIP) in 1972 and gained independence in 1981 (Beinart, 2012; Wotshela, 2004). Its name refers to its geographical position to the Kei River in

relation to the British occupied, Cape colony. 'Cis'-Kei meaning this side (West) of the Kei River, as opposed to the 'Trans'-Kei meaning the other side (East). Both the Ciskei and the Transkei were considered as Xhosa homelands but were occupied by an array of different chiefdoms (Ndima, 1988; Peires, 2012; Wotshela, 2003). Although chiefdoms were not entirely restricted to either one of the homelands, it is commonly recognised that the Transkei was occupied mostly by the Thembu, Gcaleka Xhosa, Mpondo, Xesibe and amaMpondomisa, while the Rharhabe Xhosa and Mfengu occupied the Ciskei (Peires, 2012; Vail, 1989). Other smaller chiefdoms, such as the amaQwathi and amaVundla, together with clans from Basotho nations were also granted land within the two homelands (Peires, 2012; Wotshela, 2009, 2004). The history of the Ciskei area, even before colonial conquest, was rife with social complexities, tribal politics and warfare (Peires, 1981). The formation of the Union of South Africa, in 1910, bestowed further elements of forced settlement, alienation and prejudices onto the area (Tong, 2014; Vail, 1989; Wotshela, 2009).

Before being consolidated as a homeland the Ciskei was made up of a number of reserve areas which were geographically separate from each other. The majority of the reserves lay south of the Winterberg Mountain Range and comprised areas that were remnants of Rharhabe Xhosa ancestral lands (Peires, 2012; Wotshela, 2004). Those which lay to the north were comprised of lands that had not been settled prior to colonization – instead they had largely been occupied by migratory Khoi and Thembu herders (Beinart, 2012; Green and Hirsch, 1983; Wotshela, 2004). One of the first major settlements in the area was the Shiloh mission, which was established in 1828 by the Moravian Missionary Society (Bouch, 1990; Wotshela, 2004). Later the settlements of Oxkraal and Kamastone, cumulatively known as the Hewu, were developed for the Mfengu (a multitude of clans who fled south as a result of Shaka's mfecane wars) (see Moyer 1976) who had adopted Christianity and assisted the British in the frontier wars (Bouch, 1990; Vail, 1989). Additional settlements were established for the Thembu people in the area known as Glen Grey ('Tambookie Location') (Bouch, 1990; Vail, 1989; Wotshela, 2004).

At the time of the Ciskei's establishment as a homeland, the northern reserves consisted of: the Hewu - under Zulukama tribal authority, Shiloh mission commonage – under Umziwoxolo tribal authority, Glen Grey – under the Thembu people, and an area to the south-west of Lesotho known as Herschel (Vail, 1989; Wotshela, 2004). Herschel was made up of Sotho and Xhosa speaking people, who were governed by varies chiefs from different 'clans' or 'sub groups' (Cobbett and Nakedi, 1988). Both Herschel and Glen Grey were later incorporated into the Transkei when it became independent (Cobbett and Nakedi, 1988; Vail, 1989; Wotshela, 2004). A large number of residents within these two districts did not wish to be included into the Transkei and were therefore relocated onto areas of land purchased by the South African government (Wotshela, 2004). Such land, which consisted mostly of white-owned farms, was referred to as released areas (RA) (Wotshela, 2004).The former

Glen Grey residents were moved onto an area known as Zweledinga, which consisted of RA 59 and was governed by the Thembu Tribal Authority (Wotshela, 2004). A large number of the Herschel residents, those who had not fled to QwaQwa (see Cobbett & Nakedi 1988), were settled in the Ntabethemba district, which consisted of RA 71 and 72.

The History of Ntabethemba District

The Ntabethemba (Xhosa for 'Mountain of Hope') district was named after the large flat topped mountain located in the south of the area (Surplus People Project, 1983). It was comprised of two released areas which were procured at different times: RA 71 was procured in 1976 and RA 72 was procured in 1979 (Wotshela, 2004). The extent of the area was approximately 31 000 hectares and supported an estimated 3 003 families (Wotshela, 2004). Unlike other cases of homeland consolidations, where resettlement was generally forced, the majority of relocatees to the Ntabethemba district moved there on their own accord (Green and Hirsch, 1983; Wotshela, 2004). They did so in order to escape being incorporated into the Transkei. The first people to start settling in the area did so as early as December 1975, before the bulk of the land could be procured. This resulted in major disruption to the land allocations process (Wotshela, 2004). Relocatees had to be housed in make shift transit camps, known as Thornhill and Loudon, until the procurement of additional land (RA 72) was finalised in 1979 (Surplus People Project, 1983; Wotshela, 2004). Some 40 000 - 45 000 people, along with their livestock, were said to have been housed in these camps (Surplus People Project, 1983).

Once additional land had been acquired the entire district (RA 71 & 72) was divided into three sections for the three chiefs who had come from Herschel. These chiefs had been appointed under the Bantu Authorities Act of 1951 (Vail, 1989). Land was divided based on the number of followers each chief had. The land granted to the chiefs was termed a 'tribal resource area' and received the name of the chief to whom it was granted. Each tribal resource area was governed by the chief's associated Tribal Authority – Malefane Tribal Resource Area under the Basotho Tribal Authority, Bebeza Tribal Resource Area under the amaVundle Tribal Authority and Hinana Tribal Resource Area under amaQwathi Tribal Authority (Surplus People Project, 1983; Wotshela, 2004). An additional 20 000 hectares of land (RA 81) was released in 1987 (Wotshela, 2004).

Chief Hinana, of the amaQwathi, received land adjacent to the Tsolwana Nature Reserve, which at that stage was a game reserve run by the Ciskei Department of Agriculture and Forestry (Strategic Management Plan, 2010). The initial area of land granted to the amaQwathi was approximately 9 400 hectares in size and incorporated the 1 965 meter high (above sea level), Ntabethemba Mountain. The total area of land was made up of more than 5 900 hectares of open grazing, 1 300 hectares of

irrigated field, approximately 700 hectares of tribal farm land and about 600 hectares of open hunting ground (Table 3-3). The rest was allocated as residential settlement area. Due to the problems associated with irrigation in the Hinana tribal resource area an additional 3 100 hectares of land was granted to the amaQwathi as livestock holding grounds or 'stock fattening areas' and was managed by the Ciskei Livestock and Marketing Board (CLMB)(Surplus People Project, 1983; Wotshela, 2003).

Table 3-3: Land use plan for the Ntabethemba District

Chief/TRA Tribal Authority	**Hinana amaQwathi**	**Bebeza amaVundle**	**Malefane aBesuthu**
Resettled families	1 661	346	996
Livestock [Large stock units]	900	212	809
Land [ha]			
Village area	200	128	345
Irrigated lands	1 287	450	621
Grazing areas	5 933	3 124	4 431
Tribal farms	737	390	939
Open hunting area	578		
Road, river reserves and dams	718	328	423
Total Area [ha]	9 453	4 420	6 759

Source: Derived from Ntabethemba Land Use Plan, 1978 in Wotshela 2003 & 2004

3.3.2. History of the People

A Brief History of amaQwathi

The amaQwathi are part of the ethnic peoples referred to as Nguni. Though the amaQwathi are Xhosa speaking they are not part of amaXhosa. Rather they are an independent chiefdom consisting of numerous clans (Ndima, 1988). The Qwathi chiefdom stemmed from the Xesibe chiefdom who resided in Mt Ayliff (EmaXesibeni) in the former Transkei (Ndima, 1988). Very little of the amaQwathi's history is documented in the literature but rather preserved through stories, poems and praise songs ('iziduko') (Ndima, 1988). A well-known praise in Qwathi history is the one which tells of the birth of the Qwathi clan:

"Inkomo zika Mtshutshumbe, ogqaz'indlel'- ebhek'ebuNguni."
"The cattle of Mtshutshumbe who paved the way to Nguniland."

(Ndima, 1988)

It is believed that Mtshutshumbe broke away from his father, Xesibe, and left with his followers to settle in Thembuland (Ndima, 1988). The name 'Qwathi' was the name of Mtshutshumbe's white ox, given to him once he had come of age, 'ukrwala'.

While Ndima (1988) describes much about the history of the amaQwathi living in Qwathiland (Engcobo), in the Transkei area, very little is written to describe how or why a band of amaQwathi, under Hinana, came to live in the Herschel area. The feuds, described by Ndima (1988), between the Qwathi and the Thembu might have been a possible cause for the movement. If so, it would explain why this group would not have wanted to been governed by the Thembu, who governed the Transkei at the time that the Herschel district was being incorporated into it.

During the land allocation process, whereby the Ntabethemba district was divided up amongst the three Herschel chiefs, the residents of the area were asked to sign their allegiance to one of the three chiefs. If a household did not recognise any of the chiefs as their leaders they were either forced to accept one or run the risk of not being allocated land (Vail, 1989; Wotshela, 2004). The outcome of this process meant that a number of people not belonging to Qwathi clans were settled amongst the amaQwathi, similarly with the Basotho and amaVundla. Additionally, those people who refused to pledge allegiances to any of the chiefs were left in the Thornhill and Loudon transit camps (Surplus People Project, 1983). Later, a number of these leaderless people formed their own alliance known as group four, who would later go on to form a resistance movement against Tribal Authorities (Wotshela, 2009).

In 1990 a military coup de grace orchestrated by the African Democratic Movement (ADM) party under the leadership of Brigadear Oupa J. Gqozo, overthrew Sebes's presidency and created further rifts in the tribal authority systems (Manona, 1998). In the Ntabethemba district, as was the case in other areas of the Ciskei at the time, residents with little or no allegiance to the Tribal Authorities were easily influenced by the new government regime to go against their local headmen (Ainslie, 1999; Cousins, 2010). Acts of vandalism to property controlled by Tribal Authorities was seen as a way of displaying disdain to their power.

3.3.3. The Ntabethemba Reserve

"Ntabethemba is the mountain, and it is no ordinary one… It is a brooding mountain, and like an insecure woman capable of sudden mood changes with little or no warning."

(Thomas, 2005a)

Background

The history behind the establishment of the Ntabethemba Reserve was tied together with that of development of the neighbouring Tsolwana Nature Reserve. Both these reserves were made up of private properties which had previously been used for livestock farming. In the late 1960's the owners of a few of the properties, having gone through a severe drought, decided to reduce their livestock numbers and partake in the state-subsidized stock reduction program (Grossman, 2002; Strategic Management Plan, 2006). It was during this time period and into the early 1970's that South Africa's game and hunting industry started to show signs of growth (Flack *et al.*, 2011; Grossman, 2002). Those farms which had been reduced of livestock provided ideal areas for the growth of wildlife populations and thus served well for the rising local hunting industry. However, with the expansion of the Ciskei, these properties became earmarked for inclusion into the homeland (Wotshela, 2004). But the Ciskei Government, with persuasion from some of the local farmers, saw the potential which this wildlife rich area, together with its established hunting practises, could have for the economic growth of the homeland (Andrew *et al.*, 2000; Strategic Management Plan, 2006). This paved the way for the establishment of the two reserves.

The Tsolwana Nature Reserve spans an area of approximately 8 500 hectares and incorporates the properties of Otterford, Doornhoek and Vrisgewaagd as well as portions of five others – namely: Thibet Park, Magermans Hoek, Lily Fountain, Geluk and Donny Brook (Strategic Management Plan, 2010, 2006). It was proclaimed a protected area, with an IUCN management category IV (Protected areas aiming to protect particular species or habitats and management reflects this priority), under the Ciskeian Forestry Act (No. 6 of 1976) in 1977 (IUCN, 1992). The management of the reserve first fell under the jurisdiction of the Ciskei Department of Agriculture and Forestry's Nature Conservation Division but subsequently changed hands numerous times (Table 3-4) (Strategic Management Plan, 2010, 2006). Currently it is under the jurisdiction of the Eastern Cape Parks and Tourism Agency (ECPTA), which was the previous Eastern Cape Parks Board.

Table 3-4: Change in Management jurisdiction of Tsolwana Nature Reserve over time

Date:	**Management Jurisdiction**
April 1977	- *Plan drawn up by the Ciskei Government, in agreement with local farms, to develop Tsolwana as a game reserve*
1978 – 1979	- *Procurement of properties to be included into the reserve*
1977 - 1982	Department of Agriculture and Forestry, *Nature Conservation Division*
1982 - 1985	Office of the Presidency (of the Ciskei)
1985 - 1994	Ciskei Agricultural Corporation, *Division of Wildlife Resources and Parks*
1994 - 2005	Eastern Cape Tourism Board, *Nature Conservation Division*
2005 - present day	Eastern Cape Parks Board *Now known as Eastern Cape Parks and Tourism Agency*

Source: Derived from Strategic Management Plan (2010); Strategic Management Plan (2006)

The initial model for the development of the Tsolwana Nature Reserve was put forward by Dr Ken Tinley and administered by his brother Charles (Thomas, 2006). The model was roughly based on the same principles which were being put forward in the development of the Zimbabwean Communal Area Management Program For Indigenous Resources (CAMPFIRE), in that it aimed to develop a wildlife based enterprise which would provide benefits and opportunities to the surrounding residents (Thomas, 2006). The Tinley's maintained that the only way by which the reserve could be a success is if it had the support of the large number of people who had recently been settled on its boundary. This approach of trying to benefit the local residents neighbouring a protected area was one which had rarely been explored in South Africa, owing to its entrenched style of fortress conservation. However, the Ciskei had only recently become a self-governing territory and did not have the ingrained ideologies, philosophies and bureaucracies that outlined the mandates to conservation in the rest of the country (Dressler *et al.*, 2010). Being free of these constraints, the Ciskei served as an ideal place in which to experiment with new approaches to conservation (Thomas, 2005a). Other homelands, such as Bophuthatswana, were in the same position and similar projects were started there, namely the Madikwe and Pilanesberg game reserves (Carruthers, 2011; Davies, 2000; Magome and Grossman, 2000).

The Tsolwana model was largely built on the practises put forward by South Africa's private wildlife industry as well as some of the private land owners in the area (pers. comm. Anonymous, Local Safari Hunting Outfitter). The remote location of the reserve and the fact that South Africa's live game trade had not yet fully developed meant that hunting was the best option for capitalising on game. Marketing was therefore aimed at both international and local hunters alike (Thomas 2005; pers. comm. Anonymous, Local Safari Hunting Outfitter).

The formation of the reserve

In about 1983, Chief Hinana, on behalf of the amaQwathi Traditional Authority, entered into an agreement with the Ciskei National Nature Conservation and Tourism Board (CONTOUR) to develop a portion of the land granted to the amaQwathi into a community owned game reserve (Andrew *et al.* 2000; pers. comm. Anonymous, Traditional Council Member). The intention was to develop a means of generating financial wealth which could be used for the upliftment of the people residing on the Hinana tribal resource area (pers. comm. Anonymous, Traditional Council Member; ECPTA Official). The project was to be run in union with the neighbouring Tsolwana Nature Reserve, which at the time was under the jurisdiction of the Office of the Presidency and managed by Charles Tinley (Strategic Management Plan, 2010, 2006).

The community game reserve was to be positioned around the prominent, flat topped mountain from which it, as well as the entire district, was named – Ntabethemba. The area of land which was incorporated into Ntabethemba Reserve was roughly 3 500 hectares in size. It consisted of properties that had previously been used for the stock fattening area (in connection with the CLMB), the area demarcated as open hunting ground and some of the properties granted as tribal farms. One of the properties included into the Ntabethemba Reserve was the farm Lily Fountain, which had previously been run as a private hunting reserve by the McDonald family (pers. comm. Anonymous, Local Safari Hunting Outfitter). The homestead on this property had served as their hunting lodge and was maintained that way after it had been included into the Ntabethemba Reserve. The lodge, named Lily Fountain, was marketed to hunters and non-hunters alike along with Tsolwana's three other accommodation facilities (Strategic Management Plan 2006; pers. comm. Anonymous, Local Safari Hunting Outfitter).

The reserve was enclosed with a 2.4 meter, T-topped, game fence and stocked with varies game species (Thomas, 2005a). One of the more controversial practises of the private land owners in that area (one which is still occurring to this day and is heavily criticised by conservationists (Castley *et al.*, 2001; Cousins *et al.*, 2008; Spear and Chown, 2009a, 2009b) was the introduction of game species outside of their historical, native distribution range (Thomas, 2006, 2005a, 2005b)). The reasoning

behind the introduction of foreign species was to increase the diversity of huntable game in the area (pers. comm. Anonymous, Local Safari Hunting Outfitter). As a number of the farms which were incorporated into Tsolwana had already received a variety of these non-indigenous species they were merely incorporated into the newly develop model as an asset rather than a problem (Thomas, 2005b). With the formation of the Ntabethemba Reserve, the Ciskei Government decided to expand on this model and experiment further with the idea of introducing non-indigenous game. A variety of exotic and extralimital game species were introduced onto the mountain (Strategic Management Plan, 2006). These included; Aoudad or Barbary sheep (*Ammotragus lervia)*(Thomas, 2006), Himalayan Tahr (*Hemitragus jemlahicus*)(Thomas, 2005a), Fallow Deer (*Dama dama*) (Thomas, 2005b), European Mouflon (*Ovis orientalis orientalis*) (Thomas, 2005b), and Hartmann's Mountain Zebra (*Equus zebra hartmannae*) (Thomas, 2005b).

How the reserves operated

The Ntabethemba Reserve operated purely as a hunting reserve. Hunting rights to animals which were considered of trophy quality (horn lengths above a prescribed minimum length) were sold to various private hunting outfitters who marketed them to overseas clients. Annual off take quotas, based on the results from game censuses, were determined through discussions between the Tribal Authorities and the Tsolwana management staff. Those animals which formed part of the yearly off take quota, but not considered of trophy quality, were sold either to local South African hunters (marketed through Tsolwana) or to hunting outfitters, who marketed them as part of non-trophy hunting packages. Hunters, both local and foreign, generally utilised the available accommodation of which Lily Fountain Lodge was said to have been a prized choice (pers. comm. Anonymous, Local Recreational Hunter). The trophy quality of game taken off Ntabethemba was said to have ranked amongst the highest in the world. In the 2008 African field edition, Safari Club International records, the number two position for both Barbary sheep and Himalayan tahr trophies, for animals taken outside of their natural range, was held by animals taken from Ntabethemba (SCI, 2008).

Important to note was that local residents were denied the opportunity to practise traditional hunting in the reserve or even the surrounding areas. As residents could not afford to purchase any of the off take quotas hunting on the reserves were limited to outsiders (most likely white outsiders).

The management of the reserve was undertaken through a joint management agreement between the managers of Tsolwana Nature Reserve and amaQwathi Tribal Authority. Tsolwana staff were in charge of on-the-ground operations (patrolling, maintenance, game censuses, etc.) as well as marketing and administering the hunting (whether it was tenders to outfitters or non-trophy hunts to local South Africans) (pers. comm. anonymous, Ex-manager Tsolwana Nature Reserve). All profits

generated from hunting as well as profits from the Lily Fountain Lodge were released into a bank account managed by the amaQwathi Tribal Authorities under the leadership of Chief Hinana (pers. comm. anonymous, ECPTA Official). The Tribal Authority was tasked with administering these funds so as to conduct community projects. Chief Hinana had signing power over these funds (pers. comm. anonymous, amaQwathi Tribal Authority).

The benefits from the reserves

Benefits from the Ntabethemba Reserve were mostly in the form of income which was utilised for various community projects such as: an education scheme – for which a number of computers were purchased for the main high school at Tentergate and an agricultural development scheme/irrigation scheme – for which a tractor and various tools and implements were purchased. As part of the education scheme, a bursary fund was set up from which the matriculants of the villages within the Hinana tribal resource area would be able to apply for funding to continue with a tertiary education. Part of the income received from the reserve was also used by the Tribal Authorities to cover the administrative costs of facilitating the community projects as well as other administrative work conducted by the Tribal Authorities on behalf of the community.

As the work carried out on the Ntabethemba Reserve was done using staff employed by Tsolwana Nature Reserve, very few additional job opportunities were created. Approximately 50 employment positions were made available for the management of both Tsolwana and Ntabethemba Reserves. The positions were for field rangers, trackers, skinners, general foremen, maintenance, housekeepers, cooks, administration clerks, and general managers. While most positions were filled by people from within the Hinana tribal resource area the high end and skilled positions were filled by outsiders (pers. comm. anonymous, Ex-manager Tsolwana Nature Reserve). The Lily Fountain Lodge would have provided approximately four to five additional employment positions in the form of house keepers, cooks and garden staff.

The meat left over from hunts was an additional benefit which the local residents received from the hunting reserve (pers. comm. anonymous, Ex-manager Tsolwana Nature Reserve; Local Hunting Outfitter). As trophy hunters only took away the horns and the skins of the animals they shot the remaining meat was either donated or sold cheaply to the residents within the tribal area. It is assumed that meat from the animals hunted on the Tsolwana Nature Reserve would also have been included amongst these sales.

Due to the lack of formal grazing regimes within the tribal resource area there was often a short supply of adequate grazing during the dry winter months. An agreement was set up whereby stock farmers could graze their livestock within the Ntabethemba Reserve during the dry months (pers.

comm. anonymous, Ex-manager Tsolwana Nature Reserve; Local Headman). The reserve therefore served as a safety net to stock farmers particularly in times of drought.

The problems it faced

While Tsolwana game guards only stopped patrolling the Ntabethemba Reserve in 2007 the project was already showing signs of rupture in the early 1990's. Poaching levels began to rise rapidly out of control and local residents started to disregard the management's authority and began grazing their livestock in the reserve irrespective of the season. The increased encroachment of people into the reserve resulted in a deterioration of the infrastructure and amplified the strain on management. The boundary fences were frequently being cut and at some places even removed altogether. A breakdown of governance was clearly visible as Tribal Authorities lacked the ability to enforce rules or even influence people's actions.

In 1994, the Eastern Cape Tourism Board (ECTB), who were the successors of CONTOUR after the Ciskei was disbanded, started to suspect the Tribal Authority of misusing funds generated by the Ntabethemba Reserve (pers. comm. Anonymous, ECPTA Official). They therefore withheld funds from the Tribal Authority and demanded that transparent accounts of spending be revealed (Andrew *et al.* 2000; pers. comm. Anonymous, ECPTA Official). Tribal Authority reacted by taking the state (or ECTB) to court. The court ruled in favour of the Tribal Authority and ordered ECTB to release the funds. Subsequent to the ruling, funds were channelled through an account held by the magistrate's office in the town of Whittlesea where Tribal Authorities were expected to submit a budget in order to procure any funds from the account (pers. comm. Anonymous, Tribal Authority).

Further disruption to operations of the Ntabethemba Reserve came about when disputes arose over the allocations of the hunting tender within the reserves managed by ECTB[5]. The total value of the hunting tenure which spanned across three reserves was believed to have amounted to more that R2 million (Loewe, 2001). Part of that tenure was the quota set for hunting on the Ntabethemba Reserve. The politics over tenure allocation put even more strain on the hunting practise on Ntabethemba. Eventually in 2006 all aspects relating to hunting on the mountain, including quota setting, permit application and dealings with safari outfitters, was handed over to the Tribal Authorities.

[5] see Supreme Court of Appeal; Government of the Province of the Eastern Cape vs Frontier Safaris (PTY) Limited Case 96/96 (1997)[RSA].

Due to major acts of vandalism and complete lack of financial turnover the Lily Fountain lodge was closed. Furniture and other movable items were relocated to a storage facility.

The current state of Ntabethemba

Today the Ntabethemba Reserve is no more. The boundary fence has completely been removed and all existing infrastructure has been vandalised. The mountain is being utilised as grazing land for the livestock of residents from the villages closest to its foothills. The only remaining indigenous game species left are a small herd of blesbok (*Damaliscus pygargus phillipsi*) and the odd mountain reedbuck (*Redunca fulvorufula*). Of the exotic species that were introduced onto Ntabethemba approximately 70 Himalayan tahr, 150 Barbary sheep, 80 fallow deer and six Hartmann's mountain zebra are still left on the mountain (estimates from current staff at Tsolwana Nature Reserve).

A small number of Barbary sheep and Himalayan Tahr hunts are still sold each year to private safari outfitters who book through the Tribal Authorities office (pers. comm. Anonymous, Tribal Authority). While hunts are generally accompanied by a resident of Thembaletu (the closest village to the mountain) there is no formal system in place to monitor game numbers or determine hunting off takes. Hunts are sold at a first come first serve basis with Barbary sheep being sold for R 2 600 (US$ 260) [6] and Himalayan tahr R 3 500 (US$ 350) [2]. These animals are sold to overseas clients for up R6 000 (US$ 600) [6] for the animal alone. A day fee for such a hunt can be as high as R 4000 (US$ 400) [6] (pers. comm. Anonymous, Local Safari Hunting Outfitters). As there is no control over the hunting by local residents, the number of animals is continuously declining making it ever more challenging to find suitable trophies.

3.4. Discussion:

In cases such as this, where clear evidence is sparse and that which is available is known to be opinionated, it is very difficult to pin point direct causes for failure. It is therefore necessary to analyse available evidence in the light of other, similar, situations. A number of issues identified in other community based initiatives, particularly in the homeland settings of the Eastern Cape (Ainslie, 1999; Bennett *et al.*, 2010; Cocks *et al.*, 2001), stand out when analysing the failure of the Ntabethemba Reserve. These are: (1) past political upheavals (Cocks *et al.*, 2001), (2) a top heavy approach to management, (3) uneven means of resource distribution, (4) lack of empowerment within the project,

[6] 2013 exchange rate of R10.01 to the US$ (FirstRand, 2014)

(5) breakdown of traditional authority, (6) a lack of adequate resource tenure and statutory power (Cocks *et al.*, 2001),

Past political upheavals

The 1990 Ciskei military coup can be seen as one of the main turning points for the success of the Ntabethemba Reserve as it was the force that caused the unravelling of its poor foundation. Although the reserve was most probably established with good intentions in mind and to the best of the abilities of those involved, it was the system into which it was established that was flawed.

The Tribal Authorities or headman system which was initiated by the 1951 Bantu Authorities Act played on the notion that it was a traditional approach of governance when in fact it was a means by which the apartheid government could effectively control the black populations (Cousins, 2007; Vail, 1989). This system was further exploited by the political parties who took over the governance of the homelands (Bennett *et al.*, 2013).

As government allocated land and other resources via Tribal Authorities, a system of favouritism arose whereby Tribal Authorities who supported the ruling party got access to more opportunities, similarly to the residents who support those Tribal Authorities (Bennett, 2013; Bennett *et al.*, 2013). Residents who lost out on these deals became increasingly disgruntled and formed anti-tribal authority movement groups, often referred to as residents associations (Ntsebeza, 2004). These associations were later supported by the rising civil organisation which formed in the years leading up to the 1994 elections (Ntsebeza, 2003). In the Ntabethemba district the association known as Group Four (Wotshela, 2004) spearheaded the movement against Tribal Authorities in the area, followed by the Thornhill Residents' Associations (Wotshela, 2009). In rebellion towards Tribal Authorities, members of these residents associations would poach natural resources such as grazing, thatch grass, firewood and wildlife from the surrounding tribal resource areas (Wotshela, 2004).

> *"…the people from uHewu just come here and poach… There is [also] a challenge in this community, but it is not bad… just need awareness and education for the youth. The youth are important because they are the ones who poach." (pers. comm. Anonymous, Tribal Authority)*

By the time Gqozo came into power and set about disbanding the headman system it had already become increasingly unpopular (Cocks *et al.*, 2001). Efforts by Gqozo's supporters to try and take control over community based projects operated by Tribal Authorities were seen in a number of instances across the Ciskei (Ainslie, 1999; Cocks *et al.*, 2001; Manona, 1998). The Ntabethemba project was one of them.

"…the problem started after a "coup d'etat" was staged against Chief N.T. Hinana by the Gqozo henchmen. They demanded to be in charge of the finances generated from the game project." (pers. comm. Anonymous, Tribal Authority/Royal Family)

Other, more locally based, political changes compounded the breakdown of the reserves operation, such as the continual change within the structures of the agencies tasked with facilitation of its management (Table 3-4). When the Department of Environmental Affairs (then the Department of Economic Affairs, Environment and Tourism - DEAET) assigned the management of all provincial parks to the Eastern Cape Parks Board (ECPB) in 2005, it created much confusion as to who was responsible for the community reserve (pers. comm. Anonymous, ECPTA Official). Not wanting to take responsibility of the project, that in all fairness was already sinking, both parties allowed the project to enter into a state of no return.

Top heavy approach to management

Whilst past political situations undoubtedly played a major role in the collapse of the community reserve it can be said that the top heavy structure by which it was established allowed for it to collapse. Too much emphasis was placed on the management of the project rather than training residents from within the community to take over necessary roles.

"…we [Tsolwana] did everything for them, they just got the money. Our management set the quotas and prices and then we would have a meeting with the Tribal Trust to give them an idea of what they can expect." (pers. comm. Anonymous, ECPTA Official)

When full management of the reserve was finely handed over to the Tribal Authority in 2006 there was no one capable of taking responsibility of the project and carrying it forward. Additionally, a lack of skills and understanding on how the hunting industry operated meant that business was lost and revenues decreased.

"….they [Tsolwana] dropped us with no expertise or capabilities to run the project…we were just left in the dark" (pers. comm. Anonymous, Tribal Authority)

"We try to book hunts with them [Tribal Authority] through …but it's a mess…we need to be on the mountain early to get sheep [Barbary sheep] but they only want to start at nine [09:00 am]… You need to be there before dark otherwise there is no chance…One of the headmen has to come with us, but when we get there he's asleep…we want to help them but it's difficult… there are very few Barbary sheep left there… when you go there, there is just cattle and goats everywhere." (pers. comm. Anonymous, Local Hunting Outfitter).

"When we get to the headman of the village he doesn't know that we were coming, because nobody from the chief's office informed him". (pers. comm. Anonymous, Local Hunting Outfitter).

The inexperience of the new management meant that they were open to being taken advantage of by private outfitters. Although there is no clear evidence to suggest to what extent such practises took place, remarks by hunters suggested that it did indeed occur.

> *"[anonymous] used to shoot jackal for them [Tribal Authorities]… he [anonymous] would take a frozen jackal on the bakkie when he goes at night. Then they would drive around a bit with a spotlight. By the time the jackal had defrosted he would take it to show the headmen so that he could get paid… They [Tribal Authorities] use to pay him with blesbok." (pers. comm. Anonymous, Local Hunting Outfitter).*

Uneven means of resource distribution

Top heavy management structures that laid more emphasis on pleasing Tribal Authorities than the people the project was meant to serve, resulted in a somewhat skewed means of resource distribution and benefit allocations. Those who supported the ruling governance would stand a better chance of receiving benefits from resource allocations. This was seen in other cases throughout the Eastern Cape homelands (Ainslie, 1999; Bennett *et al.*, 2013; Cocks *et al.*, 2001).

Whether or not it was due to a political reason or a simple misfortune of geographical location, the residents of Kwezi (Phelendaba) village felt that they were short-handed when it came to resource distribution. Residents believed that no jobs, bursaries or any other benefit from the Ntabethemba Reserve was ever given to someone living within Kwezi (pers. comm. Anonymous, local resident from Kwezi Village). The feelings amongst residents were that most benefits were received by Tribal Authority officials, who were allegedly using income from the reserve to cover the traditional committee's administration costs.

> *"they [Tribal Authorities] bought a mini bus for the office to go to meetings… they would just take the money from that mountain to use for their petrol to go everywhere… if they would have a meeting in East London, they would just go." (pers. comm. Anonymous, local resident from Kwezi Village).*

The idea that the reserve as a project would generate an income to fund other projects meant that its' overall benefit for the local residents was diluted to such an extent that people no longer saw it as having any benefit at all. The success of the smaller projects essentially reflected on the reserve's success in the eyes of the local residents so when small projects began to fail so too did the residents support of the reserve.

Lack of empowerment within the project

It is difficult to ascertain whether or not the local residents of the Hinana tribal resource area were ever consulted or even informed as to the reserves operations or even how it was to benefit the people. If such consultation processes were made they were clearly not that effective as a large number of residents and even some headmen had limited understanding as to how and why the reserve was established.

"Tsolwana rented that land [Ntabethemba Mountain] from the amaQwathi…even now they own those animals [game]." (pers. comm. Anonymous, Local Village Headman).

A lack of understanding amongst residents coupled with the management decisions being made by people not originating from within the surrounding area meant that local residents never felt any ownership over the project. A result of which lead to residents being susceptible to the influence of political groups wishing to disrupt the governances of the ruling party or, more commonly, the tribal authority. This lack of ownership meant that residents did not feel that it was their place to safe guard the reserve from poachers and vandals.

"The people began vandalising the fence of the game reserve saying that the project meant nothing to them." (pers. comm. Anonymous, Tribal Authority)

"Even now no one said they [Livestock owners] may put their livestock on that reserve [Ntabethemba]…even though no permission was given it is not our place to say to them not to do it" (pers. comm. Anonymous, Local Resident of Tentergate Village)

Breakdown of traditional authority

While traditional Tribal Authorities are common place in African politics the current state at which they operate are far from the traditions upheld before the onset of European colonisation. Colonialism was a strong force behind breaking down a number of African traditions and imposing more western ideals of education, religion and a centralised monarchy (Fortes & Evans-Pritchard 1940; Beinart 2012; Tong 2014). In the Eastern Cape, however, colonialism brought about totally new political systems. Indigenous tribes loyal to the Cape Colony adopted western practises such as education and religion but often maintained traditional practises as well (Beinart, 2012; Campbell and Shackleton, 2001; Vail, 1989). While the Colony was trying to promote the ideal of a shift in political institutions amongst the indigenous peoples from that of tribalism to a more democratic system based on the grounds of a common Christianity (Tropp, 2003; Vail, 1989), local people were still clinging to hereditary clan lineages and political customs (Ntsebeza, 2003). The onset of the Apartheid era brought about further confusion as the ruling National Party sought to capitalise on tribalism as a means of controlling the masses (Ntsebeza, 2004). The inception of the Bantu Authorities Act of 1951, whilst having the goal of forming independent black homelands, also aimed at manipulating the traditional political systems of Tribal Authorities (Cousins, 2007; Ntsebeza, 2004; Vail, 1989). A re-tribalization process was put in place where chief and headmen were granted authority of subjects in various settlements (Ainslie, 1999; Vail, 1989). Whilst efforts were made to insure the legitimacy of the appointed official in terms of traditional hereditary lineages, only those who could be manipulated by the Government stood a chance of receiving such a title (Beinart, 2012). In the years leading up the end of Apartheid, numerous Tribal Authorities started losing their connection with the government and so lost their power over local residents (Bennett *et al.*, 2010; Cousins, 2007). While a new wave of Tribal Authorities emerged after the fall of Apartheid they were never really able to regain their traditional authority in the light of the new democracy (Vail, 1989). With no clear legislation in place to govern communal lands residents were able to pit the government and Tribal Authorities against each other.

As the formation of the Ntabethemba Reserve was essentially built on a relationship between government and the Tribal Authorities the whole structure was compromised with the loss of the power within the Tribal Authorities, associated with the rise of democracy. A restructuring process to the point of re-engaging with the actual residents of the area was never undertaken, instead the pseudo tribalism processes were maintained to the detriment of the entire project.

Unclear resource tenure and the inability to enforce rights over them

The loss of documents as a result of changes in governance of the Ciskei (Morrow and Wotshela, 2005) left a number of uncertainties pertaining to numerous details and records of land tenure. This, coupled with the lack of legal policies governing communal lands in South Africa (Mostert, 2013), meant that there was (and still is) a serious lack of clear land tenure within the whole of the Ntabethemba district. The local municipality claims the land as belonging to the state while Tribal Authorities maintain that it is their land[7].

Such uncertainties have created a situation where no one is able to effectively govern resource usage, thereby placing the area in a state similar to that of open access. The result is that individuals who are able to capitalise on the systems are able to benefit from it while the majority have to bear the costs. These same individuals are the ones who contest any projects which will impede on their ability to carry on utilising the resource.

3.5. Sub Conclusion

Although it is difficult to pinpoint the exact cause leading to the failure of the Ntabethemba Reserve a look back into its history tells a story similar to that of other failed community based initiatives. In short, the complexities that make up the social settings of communal lands in South Africa were ignored and dealt with through the age-old approach of top-down management regimes. Once the power of the initial authorities was lost the entire project was doomed to failure as local residents felt no need to keep the project alive. Future community based projects should heed warning when thinking that the support and buy in of Tribal Authorities is sufficient to develop a 'community' project.

[7] See section 9.5 Land and Housing, Tsolwana Local Municipality – IDP Review 2009/10 (Tsolwana Municipality, 2009)

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Chapter 4: Local Residents support for the re-establishment of the Ntabethemba Reserve

4.1. Introduction

One of the greatest threats facing protected areas in Africa is the encroachment of the ever increasing human population onto these areas (Oates 1999; Brandon *et al.* 1998; Lele *et al.* 2010; Dugelby & Libby 1998). As most protected areas in Africa were established with the mind set of excluding humans, their development often caused the displacement of large numbers of indigenous peoples (Carruthers 2011; Lele *et al.* 2010). Such displaced people then typically reside on the borders of the protected area causing numerous problems for its operation (DeGeorges & Reilly 2009; Oates 1999). Throughout history these situations have lent themselves to conflict, such as 'human-wildlife' conflicts where wildlife damages croplands or kills livestock (Woodroffe *et al.* 2005; Redpath *et al.* 2013) or from 'poacher-warden' conflicts where people from the neighbouring communities illegally graze livestock or poach wildlife in parks (Child 2004; Redpath *et al.* 2013; Treves 2008; Woodroffe *et al.* 2005; Steinhart 1989).

As a result of increased conflict relating to protected areas there has been a shift in conservation efforts across the globe to try and find ways to incorporate humans into conservation rather than excluding them (Dressler *et al.* 2010). Community Based Conservation (CBC) or what is more commonly referred to as Community Based Natural Resource Management (CBNRM) is seen as such a possible solution (Hackel 1999). CBNRM is based on the theory that if local people are able to benefit directly from a natural resource they would be more willing to conserve it (Hackel 1999; Isaacs & Mohamed 2000; Child 1996; Child & Barnes 2010). Similarly, if additional resources or even ecosystems are required to maintain a beneficial natural resource, they too are more likely to be conserved (Fisher & Bickel 2009; Magome & Fabricius 2004; Pollard & Cousins 2008). Moreover, the benefits obtained from a resource needs to outweigh the costs incurred by conserving it (Hill 2009; Child & Barnes 2010).

A number of Southern African countries have already successfully implemented CBNRM programs and have utilized their wildlife resource to create benefits for the local people (Jones & Murphree 2004). The Zimbabwean Communal Areas Management Program for Indigenous Resources (CAMPFIRE), which started in the 1980's (Dressler *et al.* 2010; Alexander & Mcgregor 2000), was one of the forerunners in the shift towards a more community involved, utilitarian approach to conservation. Today the CAMPFIRE program is seen as a world icon for CBNRM (Hackel 1999).

South Africa, unlike its neighbours, has yet to establish any major CBNRM programs and has neglected to implement natural resource conservation on communal land (Dressler *et al.* 2010). Even though communal land comprises more than 13% of the country's rangeland and supports about a quarter of its population (Scogings *et al.* 1999; Krug 2001; Vetter *et al.* 2006). The people residing on South Africa's communal lands are made up of the most impoverished portions of the country's population and are heavily reliant on natural resource usage (Shackleton 2005; Twine 2013; Vetter 2013). Currently conservation is seen as an opposing force which tries to keep residents from utilising resources which they need in order to survive (Lele *et al.* 2010).

Efforts to create CBNRM initiatives in South Africa are still mainly focussed within protected areas, particularly where communities have lodged a claim to ancestral land within the protected area. The Makuleke in the Kruger National Park and the !Khomani San in the Kalahari Gemsbok National Park are the most well-known of such cases (Kepe 2004; Isaacs & Mohamed 2000; Robins 2000; Hendricks *et al.* 2004; Tong 2014). Outside of protected areas the main emphasis for development and upliftment is still being placed on livestock and crop farming (Chaminuka 2013). Wildlife as a land use option for communal lands has been slow on the uptake (Chaminuka 2013). This, despite the fact that South Africa's wildlife industry is the largest in Africa and is said to be one of the fastest growing land use in the country (van der Merwe & Saayman 2004).

Sport hunting has been seen as a valuable tool for developing CBRNM programs on communal lands as the activity creates benefits from natural wildlife populations (Lindsey *et al.* 2007; Lewis & Alperttt 1997; Weaver & Skyer 2003; Nelson & Agrawal 2008). Hunting is especially important for areas which have low photographic tourism potential due to remote locality, lack of appropriate infrastructure and low abundance and diversity of wildlife (Lindsey *et al.* 2006; Lindsey *et al.* 2007).

The establishment of join management systems between government conservation agencies and rural communities could be seen as a way forward regarding conservation efforts on communal lands. Eastern Cape Parks and Tourism Agency's (ECPTA) people and parks program is one such venture which aims at breaking ties to the colonial style of fortress conservation by incorporating neighbouring communities into various community-conservation programs (Erlank 2010). Its aim is to create social upliftment through the formation of joint management systems between the parks and its neighbours.

Local tribal authorities residing on communal lands adjacent to one of the ECPTA protected areas have recently expressed interest to re-establish a failed CBNRM program known as the Ntabethemba Community Reserve (chapter 3). This program operated by leasing out communal land, adjacent to a protected area (the Tsolwana Nature Reserve), to private safari outfitters who marketed hunts to both

local and international hunters (chapter 3). The people residing on the communal land were then given the opportunity to receive benefits from the program in the form of increased job opportunities, meat sales, and cash income (which was meant to be utilised for various community upliftment projects such as bursaries for students wanting to further their education).

The community reserve was said to have operated successfully until political instability caused unrest followed by a lack of support from the local residents (pers. comm. Anonymous, amaQwathi Royal Family). Residents from the surrounding villages started to encroach on the reserve by poaching game, removing fences and grazing their livestock on the land (pers. comm. Anonymous, amaQwathi Royal Family). The reserve has since been disbanded, the boundary fence has been taken down and most of the game has been removed, mainly through illegal hunting (pers. comm. Anonymous, ECPTA Official). More recently an interest in the re-development of the reserve has arisen from a few of the headmen as well as a number of younger residents.

In order to establish if the re-development of the reserve is viable it needs to be determined whether or not the local residents will support the undertaking. To do so it is imperative to try and gauge the residents' attitudes, the influence of the society and the behavioural intentions towards supporting the re-development of the communal reserve. This study attempted to use the theory of reasoned action developed by Adjen and Fishbein (1980) as a theoretical framework by which to investigate and predict the level of support the residents would have for the re-development of the reserve.

4.1.1. Theoretical Framework

While it is common in research to use people's attitudes as a measure for issues relating to the human aspects of conservation and natural resources, few studies have used a theoretical approach to unpack the causes involved in forming such attitudes (Manfredo & Bright 2008; Jhamvar-shingote & Schuett 2013; Pate *et al.* 1996). Even fewer studies have used such an approach outside of developed countries and on populations with a low level of formal education (Jhamvar-shingote & Schuett 2013). Of the theoretical models that are available for use in fields regarding humans and conservation, the theory of reasoned action (TRA) developed by Adjen and Fishbein's (1980) stands out as one of the most commonly used methods for two reasons in particular. (Manfredo & Bright 2008). Firstly, because the methods are described clearly and results are easy interpreted for practical implementation and secondly, because it is able to unpack more from respondents' attitudes, in terms of cause and effect, rather than simply prompting a respondent to answer vague, sometimes unrelated questions thought out by the researcher (Manfredo & Bright, 2008).

This study used the TRA to gauge insight into the role of local residents' personal attitudes and that of social pressure towards their behaviour of supporting or not supporting the re-development of the

Ntabethemba Reserve. The TRA is based on the principal that one's behaviour is related to one's intention. Therefore, if it is possible to measure a person's intention it will be possible to gain a better indication of what their behaviour will be. In order to better understand the behavioural intention, the TRA examines the two main components which contribute to it, namely the personal and social components. The personal component, also referred to as the attitudinal component, assesses an individual's attitude towards the given behaviour. The theory argues that a person's attitude to a given behaviour is made up of a set of cogitative beliefs, known as salient beliefs, which are weighted by the evaluation of its outcome. The social component, referred to as subjective norms, examines the influence which social pressure has on the individual's behaviour. Subjective norms are measured by evaluating what the person thinks the beliefs (normative belief) of important groups of people (salient referents) are and weighting these according to his/her motivation to comply with the specific group.

For this study the main objectives were: (1) to determine the overall support the residents would have towards redeveloping the failed community reserve, (2) to evaluate the influence of residents' attitudes and social pressure to their support of the reserve, (3) to evaluate the different beliefs and evaluations which the residents assign to the reserve, and finally (4) to investigate any other factors (such as poverty, owning livestock, demographics or the attitude towards the neighbouring protected area) which could potentially influence the residents support for the re-development of the Ntabethemba Reserve.

4.2. Methodology

4.2.1. Study Area

The area of focus was the Hinana Tribal Resource Area situated in the Ntabethemba communal lands of the Tsolwana local municipality, in the Chris Hani district of the Eastern Cape Province, South Africa (Figure 4.1). The tribal resource area is made up of state owned land that was granted to the amaQwathi people (an independent chiefdom who speak the isiXhosa langue) (Ndima 1988) under the leadership of the former Chief Hinana, during the formation of the Ciskei homeland by the previous apartheid government (Wotshela 2004). The entire Ntabethemba area, which formed the bulk of the Northern Ciskei, is made up of three tribal areas, of which the Hinana tribal area is one (Wotshela 2004).

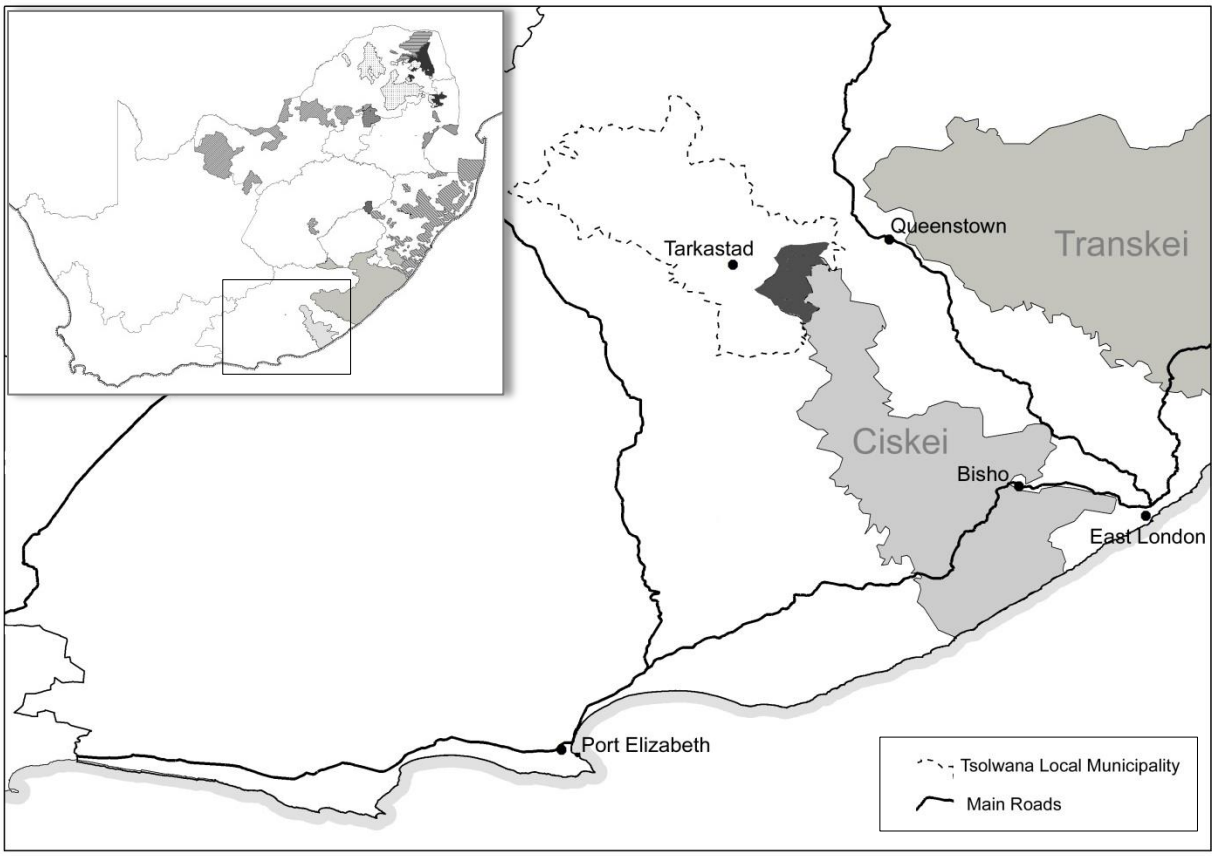

Figure 4.1: Location of the Ntabethemba District (Northern Ciskei) within the current boundary of the Tsolwana Local Municipality (Source: http://egis.environment.gov.za/).

The Ntabethemba Reserve falls within the Hinana tribal area and was meant to benefit the amaQwathi people residing on the land. The reserve is surrounded by six, semi-urban structured villages; Thembalethu, Spring Grove, Tentergate, Khayalethu, Beccles Farm and Kwezi (Figure 4.2). Each village has its own headman who is in charge of land allocations and settling of minor disputes within the village. The headman also acts as a representative on the council which is known as the amaQwathi Traditional Council. The traditional council also consists of representatives of the Hinana Royal Family, from the house of the former Chief Nimrod Hinana, as well as other administrative staff. Each member of the council, including the headmen, is remunerated by the state.

Residents in the different villages have been allocated small plots of land on which a house is built through the state run Reconstruction and Development Programme (RDP) (Tsolwana Municipality 2010). Each village's layout is somewhat different from the other but they all have a semi-urban, grid structure in terms of roads and plot allocations.

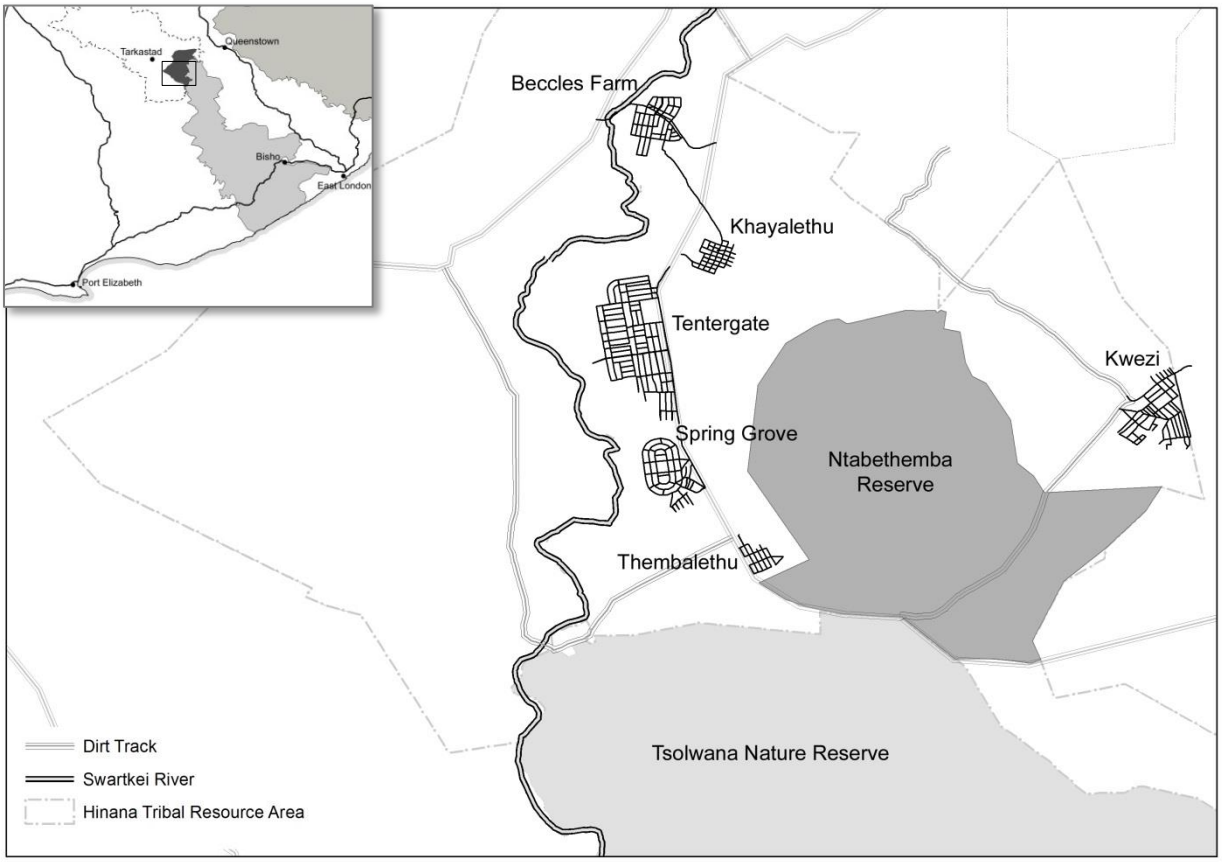

Figure 4.2: The six separate settlements within the Hinana Tribal Resource Area

Vegetation

The vegetation which stretches across the entire Ntabethemba District is known as the Queenstown Plains and falls within South Africa's Grassland biome. The vegetation is made up of Queenstown Thornveld on the flats while the high lying areas are comprised of Karroo Escarpment Grassland and Tarkastad Montane Shrubland (Mucina & Rutherford 2005). The thornveld vegetation consists mainly of *Cymbopogon - Themeda* type grasses with scattered Acacia trees as well as invading karooid shrub species.

Rainfall in the area is mostly dominated by summer storms resulting in flash floods which increase the chances of erosion. Annual rainfall varies from 400mm on the plains to as high as 700mm in the mountain areas. The main peak in rainfall is from January to March (Rutherford & Powrie 2011). North-Westerly winds are more frequent in the winter months while southerly winds - which bring cold, wet conditions - have been known to occur. Winter snow is not uncommon and occurs mostly in the mountainous areas while frost frequents the low-lying grassy plains.

The main geological characteristics of the study area are dolomite intrusions through the mud and sandstone layers (Rutherford & Powrie 2011). These are the Tarkastad formations of the Beaufort Group which forms part of the Karoo Super Group. The soils are therefore a very sandy loam or loamy sand (Rutherford & Powrie 2011). An iconic, table topped mesa, which forms the bulk of the Ntabethemba Reserve, dominates the landscape.

4.2.2. Pilot study

In order to better understand the background of the Ntabethemba Reserve, a study was conducted using semi structured interviews and informal discussions with key participants (see chapter 3). Participants consisted of: representatives of the Hinana Royal family and of the amaQwathi Traditional Council, government council members, all the headmen of the six villages, members of the amaQwathi youth development group, and various elders within the area. Due to high tension and mistrust amongst residents concerning any development relating to the Ntabethemba Mountain, research needed to be conducted in the shortest possible time and in a manner which did not incite expectations. Therefore, a pilot study was conducted whereby local participants were consulted for advice on the most appropriate ways in which to approach residents.

The pilot study provided relevant information which could be used to establish some of the basic salient beliefs and referent groups which the residents of the Hinana tribal area might have towards the Ntabethemba Reserve. Content and wording which would be included in the questionnaire was discussed.

4.2.3. Data Collection and Sampling

Data was collected during March 2013 through the use of household surveys. Surveys were conducted using researcher administered interviews. In order to get a true representation of the total population randomly selected respondents were chosen. While it is common practise to use listed house numbers when conducting random household surveys the nature of the numbering system in the area made it difficult to acquire accurate and visible house numbers. Therefore, a remote sampling technique was implemented by using satellite imagery and geographic information system (GIS) software. The plots of land allocated to each household, which are clearly visible on Landsat 2010 imagery at an eye altitude of 20 meters, were digitised using ArcGIS v10.0 ESRI®. Plots were assigned random number and sorted using Microsoft Excel Software. Five per cent of the plots for each village were selected. Resulting in 127 plots being selected; 26 from Kwezi, 10 from Thembalethu, 11 from Spring Grove, 52 from Tentergate, 10 from Khayalethu and 15 from Beccles Farm (Figure 4.3).

Target respondents for the study were the acting household heads. Interviews were conducted in the local language; isiXhosa. Although the researcher was familiar with the Xhosa language, a research assistant, who was a member of the community, was contracted to assist in the introduction process of the interview. The assistant aided in translating difficult concepts and acted as a witness to any verbal consent which was given. The latter was required as not all the respondents were literate.

Figure 4.3: Example of randomly selected plots/houses (marked with black X). Important to note is that this is merely an illustration. For the sake of confidentiality the actual houses sampled were not included.

4.2.4. Research Instruments

Questionnaires were developed by using the procedure described by Ajzen & Fishbein (1980). Statements were scored in a similar manner as to Pate *et al.* (1996). A pilot study was used to test the accuracy of the translation, readability and format of the questionnaire.

Behavioural Intentions

To measure the respondent's behavioural intentions they were asked whether or not they would support the re-development of Ntabethemba Reserve. The answer "yes" was scored as positive (+1) and "no" as negative (-1). If a respondent did not want to say yes or no they were scored a neutral (0).

Attitudes and Subjective Norms

Two open ended questions were used to gauge the respondent's attitude and subjective norms regarding the Reserve. The answers were then coded and scored on a five point scale, in terms of being positive or negative (very positive = 2, positive = 1, neutral = 0, negative = -1, very negative = -2). This resulted in a direct measure for attitude and subjective norms. Additionally, questions gauging the respondents' attitude to the neighbouring Tsolwana Nature Reserve as well as the use of hunting on the Ntabethemba Reserve were also asked.

Behavioural Beliefs

Through the interviews conducted during the pilot study it was possible to identify the salient beliefs and referent groups required to develop a questionnaire in accordance with Ajzen & Fishbein (1980). Eight salient beliefs were identified. Each belief was measured using two similar statements, one to gauge the strength of the belief and the other its outcome evaluation. Each statement was linked to a five point scale. To gauge the strength of a belief, respondents were asked to list the extent to which they agreed or disagreed with the corresponding statement (strongly agree = 2, agree = 1, neutral = 0, disagree = -1, strongly disagree = -2). Respondents were also asked to list the extent of whether they thought the outcome of the statement would be good or bad (very good = 2, good = 1, neutral = 0, bad = -1, very bad = -2).

Normative beliefs

To assess whether or not the respondents perceive social pressure relating to their support of the Ntabethemba Reserve, the normative component was measured using statements referring to the salient referent groups' support of the re-development of the Reserve. As with beliefs, the normative component was measured with two similar statements, each tied to a five point scale. One was used to

gauge the strength of the normative belief and the other the respondent's motivation to comply with the referent group. To gauge normative belief, respondents were asked to list the extent to which they agreed or disagreed with the statement (strongly agree = 2, agree = 1, neutral = 0, disagree = -1, strongly disagree = -2). The respondents were also asked to list the extent to which they comply with the salient referent group (always = 2, almost always = 1, neutral = 0, almost never = -1, never = -2). In total the questionnaire consisted of 24 statements.

Other factors

In order to determine if any other factors had an influence on the respondents behavioural intentions, questions relating to household demographics, livelihoods and livestock where included in the questionnaire. A poverty index, using data retrieved from the questions relating to household livelihoods, was created for each household. The poverty index was created in accordance with the simple poverty score card developed by Chen *et al.* (2009). An index of the value of a household's livestock was derived by multiplying the total number of livestock (cattle, sheep and goats) which a household owns by the average price per animal in that particular village. Only the livestock which utilises grazing (cattle, sheep and goats) was included in this index as they are in competition for the space taken up by the Ntabethemba Reserve.

4.2.5. Data Analyses

Data was analysed using SPSS® statistical software (IBM® SPSS® Statistics. 2010). Descriptive statistics were used to analyse social demographics, household livelihoods (by looking at the poverty index), livestock numbers and value, as well as to determine the overall attitudes of the residents towards redeveloping the Ntabethemba Reserve. The demographics results were compared to those obtained by STATSSA for the national census (2011).

The model used by the TRA can be described using the following equation:

$$\mathrm{B} = \mathrm{BI} = Att_{(W_1)} + SN_{(W_2)}$$

Behaviour (B) can be determined by one's behavioural intention (BI) which is a function of one's weighted (W_{1+2}) attitude (Att) and subjective norms (SN) (Ajzen & Fishbein, 1980; Manfredo & Bright, 2008).

In turn, attitude and subjective norms can be represented as follows:

$$\text{Att} = \sum_{i=1}^{n} b_i \, e_i \qquad \& \qquad SN = \sum_{i=1}^{n} nb_i \, mc_i$$

Where for attitude: *b* is the strength of a belief, *e* is the evaluation of its outcome and *n* is the number of salient beliefs. For subjective norms: *nb* is the normative belief of a salient group, *mc* is the motivation to comply with that group and *n* is the total number of salient groups (Fishbein & Ajzen, 1975; Jhamvar-shingote & Schuett, 2013).

In order to test the models predictive validity, relations between behavioural intention (BI), attitudes (Att) and subjective norms (SN) were examined using point-bivariate correlations and linear regressions. The eight beliefs (*b*) and four normative beliefs (*nb*) pertaining to the re-development of the Ntabethemba Reserve were each multiplied by their reciprocal weights, these being outcome evaluation (*e*) and motivation to comply (*mc*). This resulted in eight items relating to attitude and four items relating to subjective norms. These item groups were tested for reliability using Cronbach's Alpha index (Cronbach 1951). The eight items relating to attitude where subjected to a factor analysis resulting in the extraction of a single factor (Eigenvalue >1) which could explain the maximum variability. The attitude measure was then regressed on this factor. Similarly, the four items pertaining to the normative component were also subjected to a factor analysis. This also resulted in a single factor which was regressed with the measure of subjective norms. The behaviour intention was then regressed on the attitude and subjective norms measure. The relative importance of each measure was assessed with the Standardized beta regression coefficients.

To compare the attitudes of the respondents who would support the re-development of the Reserve to those that would not, an analysis of variance was conducted on the eight beliefs, their outcome evaluations and their products. Samples were split into three groups based on the behavioural intention of supporting, not supporting or remaining neutral to the re-development. A homogeneity test was conducted on each variable and when the test revealed a significant *Leven statistic* ($p < 0.05$) a robust test for equality of means (Welch test) was used instead of the standard analysis of variance.

4.2.6. Ethics

Ethical clearance to undergo this study was granted by Stellenbosch University under the reference: DESC_Gird2012. A study proposal was sent to the relevant representative of Eastern Cape Parks to inform them of the on-going research. Meetings were held with the key representatives of the amaQwathi Royal family in order to get permission to do research on amaQwathi land and within the community. Signed, written permission was received from the secretary of the amaQwathi Royal

family. Written permission was then obtained from each headman of the six villages in the study area to conduct household surveys within their village.

4.3. Results

A total of 118 questionnaires were completed for the study; 23 from Kwezi, 10 from Thembalethu, 11 from Spring Grove, 50 from Tentergate, 9 from Khayalethu and 15 from Beccles Farm. This resulted in a final response rate of 93%. Only two households (one from Kwezi and one from Tentergate) refused to take part in the interview, stating that they did not wish to talk about the Ntabethemba Mountain. The rest of the non-responses were due to absenteeism (n = 3) as well as the plot/house being abandoned (n = 4). Of the respondenets interviewed four (n = 4) did not wish to reveal their age and one (n = 1) did not wish to give information related to their economic situation (poverty score card).

4.3.1. Socio-demographic Profile

The average age of the respondents was 58.8 years (n =114, SD = 16.73) while 47.4% (n=114) fell within the > 60 years category. The majority of the respondents were female (63.6%) and 36.4% were male. A high proportion of the respondents were widowed (33.9%), while 31.4% were formally married, 13.6% were married under traditional laws, and 21.2% were single. The majority (45.6%) of the respondents had no formal education; 36.0% had a primary school education, 6.1% had a lower high school education, 11.4 % had an upper high school education and just a single respondent (0.9%) had a tertiary level education. The highest percentage (57.6%) of respondents relied on government grants (pension, disability grant and child support) as the main source of income: 22.0% of the respondents were unemployed with no source of income, 14.4% were employed part time, and only 5.9% of the respondents were employed full time.

4.3.2. Household livelihoods

The average household interviewed consisted of six people (x = 5.58, SD = 2.85) and had a poverty index of 38.58 (n = 117, SD = 12.15) giving it a 77.2% chance of a falling below the Upper-Bound National Poverty line of R620 (US$ 6206)[8] house hold income per person per month and a 15.5% chance of a household falling below the National Food Poverty Line of R312 house hold income per person per month (Chen *et al.* 2009). It was ascertained that 37.6% of the respondents had a greater

[8] 2013 exchange rate of R10.01 to the US$ (FirstRand, 2014)

than 64.2% chance of being below the national poverty line. Only 19.7% of the respondents had less than 5% chance of falling below the national poverty line.

4.3.3. Livestock & Owners Profile

It was found that 69.5% of the respondents owned some form of livestock or poultry; 54.2% owned livestock which utilised grazing resources (cattle, sheep & goats), of which 84.4% own cattle, 25.0% owned sheep, and 34.4% owned goats. Sheep formed the bulk of the livestock owned (52.7%) while cattle and goats only made up 31.0% and 16.3%, respectively (Figure 4.4). The average total herd size of grazing animals for interviewed livestock owners was 32.1 (SD = 80.6) with a median of 7.5 (IQR 3-22) animals (Table 4.1). A herd of cattle were on average 11.8 (SD = 32.4) animals strong with a median of 5 animals (IQR 3-10). Sheep and goats were on average 67.8 (SD = 89.9) and 15.2 (SD = 19.0) animals strong with a median of 5 (IQR 3-10) and 9 (IQR 4-18.5) animals respectively.

The average and median herd/flock sizes were heavily skewed by the top three livestock owners. It was found that the top 10% of the respondents owned 78% of the livestock of which the three (3% of respondents) largest livestock owners owned 55% of the livestock (Figure 4.5).

The most important usage of livestock, which interviewed livestock owners reported on, was for traditional uses (28.1%) and as a source of meat (27.6 %) (Figure 4.6). Cattle and goats were kept mainly for tradition (52.5% and 66.7% respectively) while sheep were kept as a source of meat (27.0%), income - selling wool (40.5%) and live sales (32.4%) (Figure 4.7).

Table 4.1: Herd/flock size of interviewed livestock owners living in the villages surrounding the Ntabethemba Reserve.

Village Name	Max	Min	Mean	Std	Median	Q1	Q3	IQR
Kwezi	58	1	14.2	14.6	8.5	4.8	22.5	17.8
Thembalethu	475	3	116.2	202.4	16.0	14.0	73.0	59.0
Spring Grove	93	1	23.0	32.6	6.0	3.0	22.0	19.0
Tentergate	318	1	22.3	61.9	4.5	3.0	13.3	10.3
Khayalethu	29	2	17.7	14.0	22.0	12.0	25.5	13.5
Beccles Farm	336	8	82.0	142.1	22.0	20.0	24.0	4.0
Total	475	1	32.1	80.6	7.5	3.0	22.0	19.0

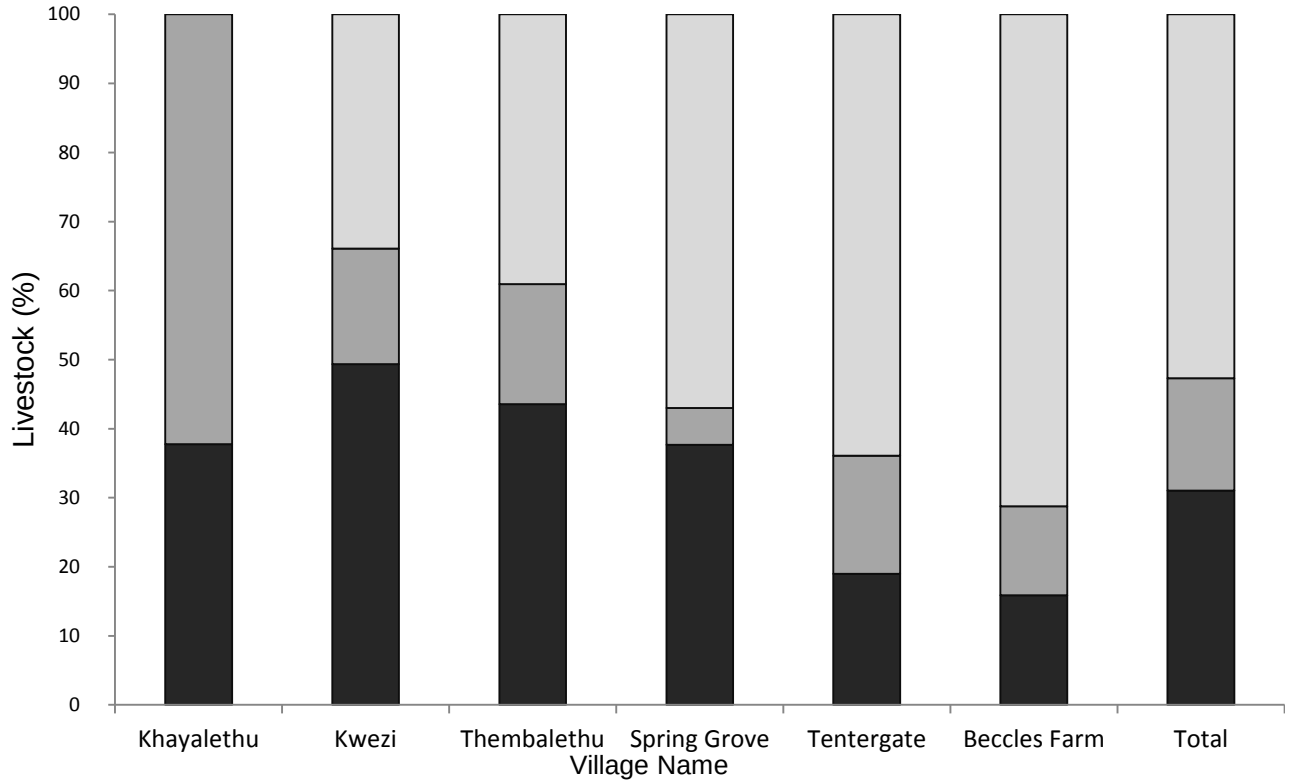

Figure 4.4: Percentage of grazing animals (Cattle, Goats & Sheep) owned by interviewed livestock owners living in the villages surrounding the Ntabethemba Reserve.

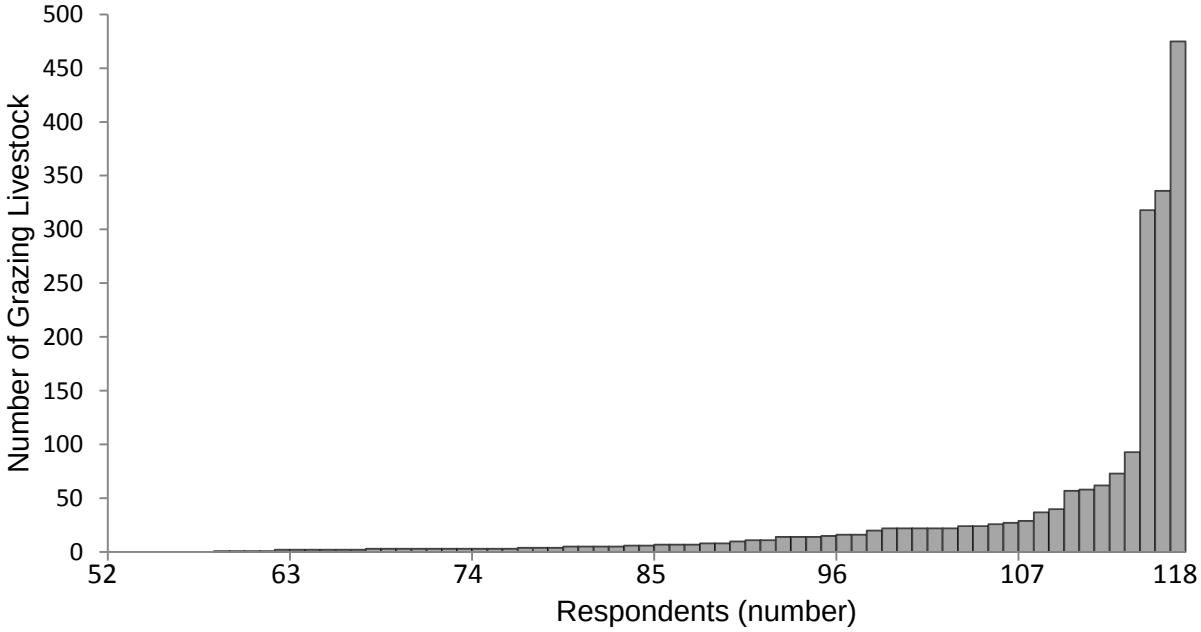

Figure 4.5: Total number of grazing animals (cattle, sheep and goats) owned by respondents residing in the villages surrounding the Ntabethemba Reserve. Starts at respondent number 52 as all the respondents before owned no grazing animals.

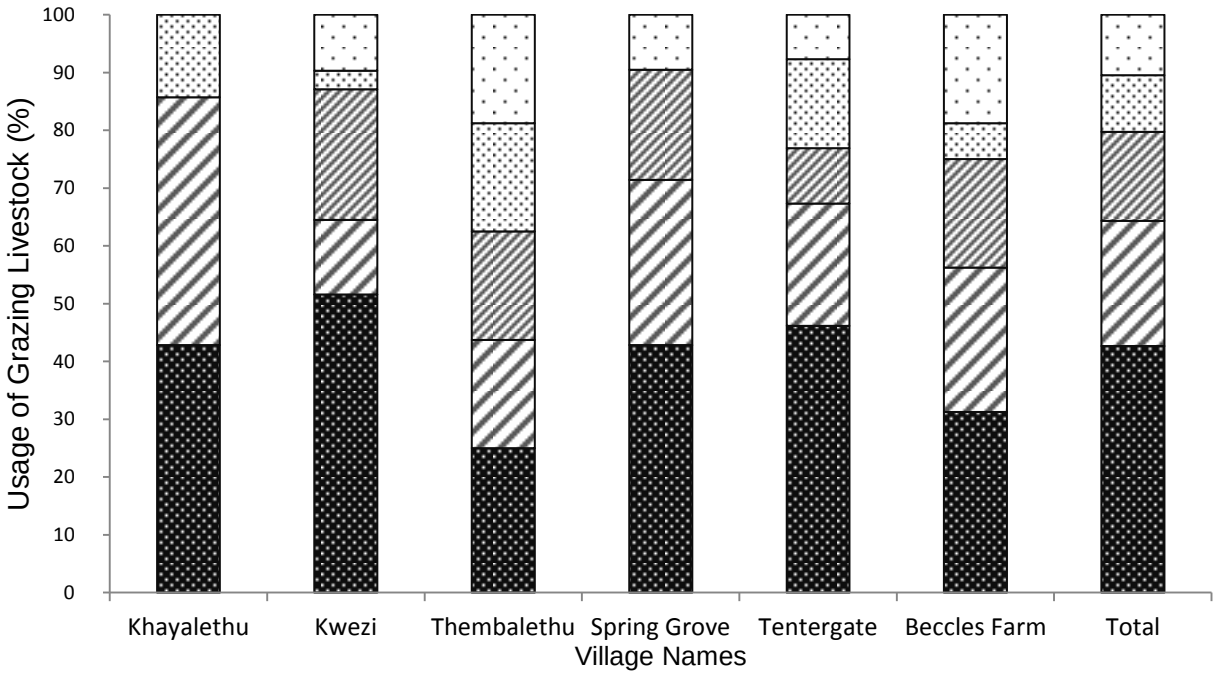

Figure 4.6: The main usages (tradition, meat, ive sales, milk & wool) assigned to grazing livestock by respondents residing in the villages surrounding the Ntabethemba Reserve.

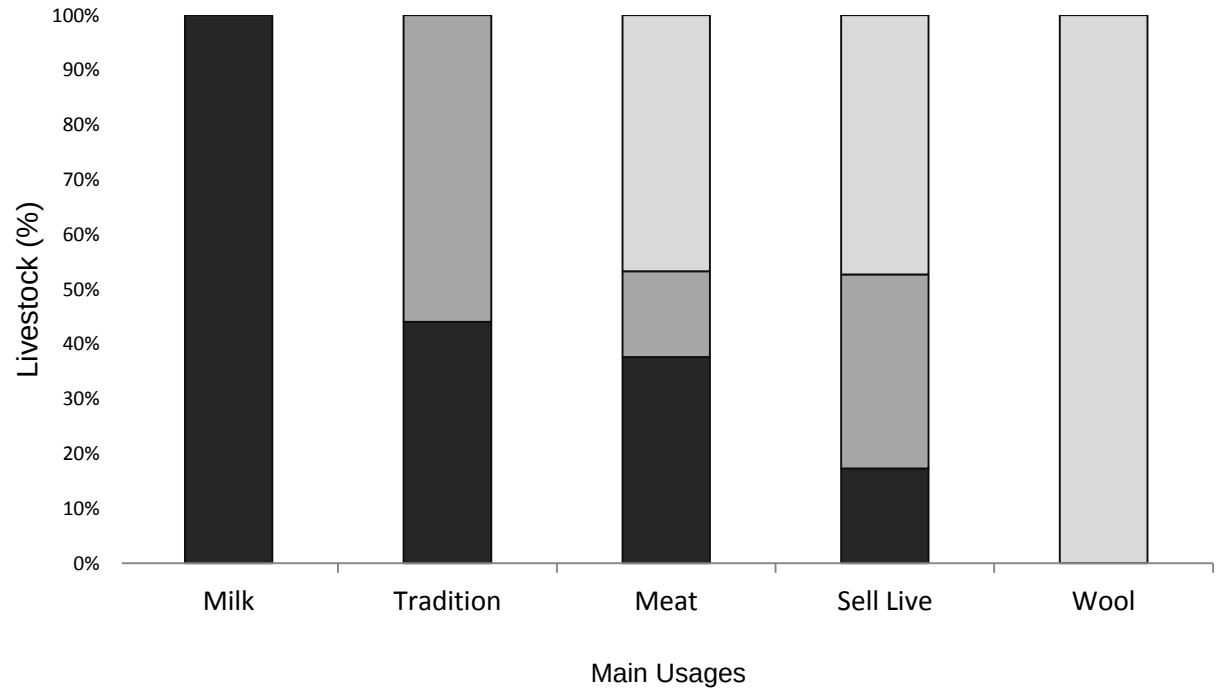

Figure 4.7: The main usage assigned to the different livestock species (Cattle, Goats & Sheep) by respondents within the amaQwathi community residing in the villages surrounding the Ntabethemba Reserve.

4.3.4. Theory of Reasoned Action

Results showed that 73.7% of the respondents would support the re-development of the Ntabethemba Reserve while 19.5% would not. The remaining 6.8% could not say whether they would or would not. The majority of the respondents (73%) believed that the area should be marketed for safari hunters, whilst 13% were against it, 9% were neutral and 5% were unsure.

4.3.5. Behavioural Intention

The results indicated by Pearson's correlations and regression analysis (Figure 4.8) show that the model is consistent with the TRA. The model explained 84% of the variance with regards to respondents' behavioural intention of supporting the re-development of the Ntabethemba Reserve. Attitude was weighted with a significant standardized coefficient of 0.81 ($p < 0.001$) and was highly correlated ($r = 0.91$, $p < 0.001$) with behavioural intentions. Subjective norms had a smaller standardized coefficient ($\beta = 0.16$, $p < 0.001$) and while it had a high correlation coefficient ($r = 0.64$, $p < 0.001$) it was still smaller than that of attitude. Therefore, while subjective norms had a significant influence on the respondents' support to the re-development of the Reserve, the influence of personal attitude was greater.

Respondents' attitude towards Tsolwana Nature Reserve and their attitude to hunting on Ntabethemba had no effect on the level of variance explained by the model. Both measures were found to have no significant influence on the respondents' behavioural intention. Similarly, the household poverty index and livestock value index was also shown to be not significant.

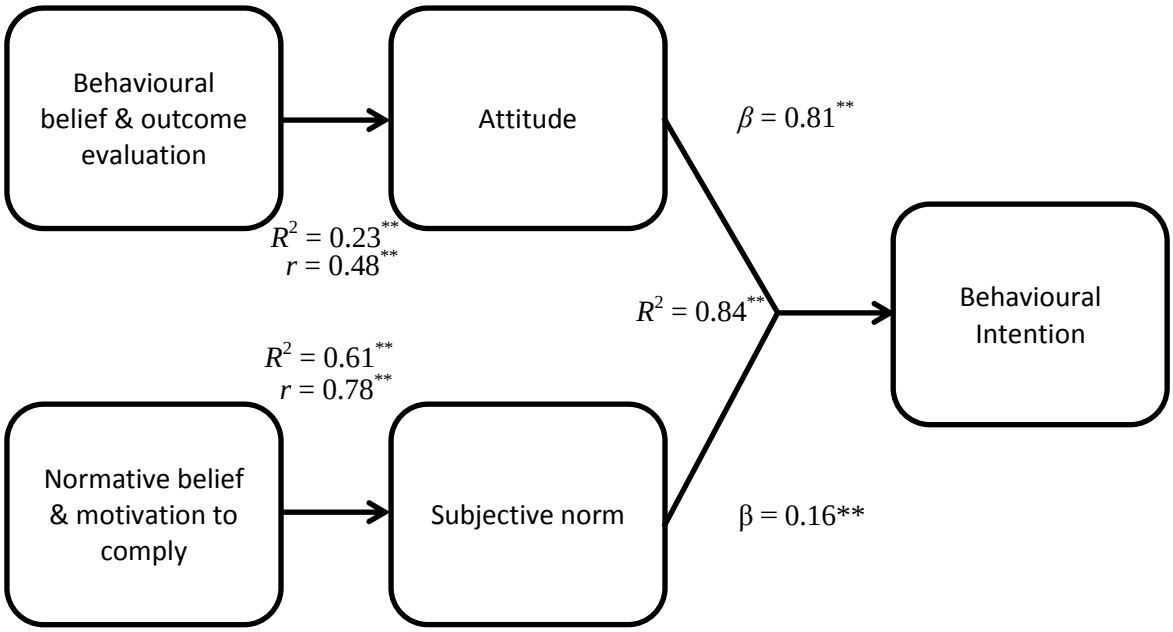

Figure 4.8: Model illustrating the Theory of Reasoned Action (n = 118). **P < 0.01 (Jhamvar-shingote & Schuett 2013)

4.3.6. Beliefs

The breakdown of the items relating to attitude, between the three responses to supporting the re-development of the Ntabethemba Reserve, revealed a statistically significant difference between all three groups (Table 4.2). Respondents who would not support the re-development of the Reserve believed that it "means there will be less land for livestock" and that it would "create conflict amongst people from [their] village". The means of the products of these beliefs revealed that these respondents saw the outcomes as being likely and undesirable.

Those who would support the re-development believed it would "provide jobs…", "bring in money to develop [their] village", "generate money for bursaries…", "bring back wildlife to [the] area" and "protect wildlife for [their] children and grandchildren". Those who would support re-development viewed this as being both likely and desirable.

Both groups were positive about the notions that the re-development would "bring foreign hunters to [the] area". Those who would support the re-development were just more positive than those that would not. While those that would support the re-development agreed that it would bring foreign hunters to the area the evaluation of this outcome was only slightly positive (x = 0.68).

Table 4.2: Breakdown of beliefs associated with the three responses to supporting the re-development of the Ntabethemba Reserve.

Outcome items	NO n = 23		NEUTRAL n = 8		YES n = 87		*Levene Statistic*	*F*	*Welch Statistic*
	$\bar{x}$	SD	$\bar{x}$	SD	$\bar{x}$	SD			
Redeveloping Ntabethemba Community Reserve will…									
… provide jobs for the people of this village									
BE_Product	-0.04	1.49	0.88	1.46	3.37	1.17	0.13	74.32 **	56.64 **
Disagree-Agree	-0.57	1.12	0.50	0.76	1.68	0.62	13.15 **		47.39 **
Bad-Good	1.09	0.90	1.50	0.53	1.93	0.33	42.21 **		11.43 **
… bring in money to develop this village									
BE_Product	-0.61	1.50	0.88	1.46	3.23	1.20	0.19	87.59 **	67.51 **
Disagree-Agree	-0.83	0.94	0.63	0.74	1.62	0.61	3.55 *		71.30 **
Bad-Good	1.04	0.88	1.13	0.83	1.91	0.36	28.54 **		13.22 **
… generate money for bursaries for students									
BE_Product	-0.57	1.97	0.63	1.41	2.57	1.66	0.95	32.75 **	27.35 **
Disagree-Agree	-0.87	1.14	0.38	0.74	1.29	0.85	1.63	52.57 **	37.13 **
Bad-Good	1.09	1.00	1.00	0.53	1.91	0.39	31.32 **		17.02 **
… mean there will be less land for livestock									
BE_Product	-3.04	1.80	-0.50	2.56	-0.57	2.04	0.41	13.70 **	15.85 **
Disagree-Agree	1.70	0.76	0.63	1.30	-0.93	1.26	4.11 *		76.35 **
Bad-Good	-1.78	0.60	-0.75	1.04	0.10	1.29	10.61 **		49.36 **
… create conflict amongst people from this village									
BE_Product	-3.13	1.79	-0.88	2.70	0.93	2.19	1.20	32.98 **	40.96 **
Disagree-Agree	1.61	0.99	0.75	1.28	-0.63	1.23	3.18 *		41.59 **
Bad-Good	-1.83	0.49	-1.38	1.19	-1.14	1.04	10.98 **		10.05 **
… It will bring back wildlife into this area									
BE_Product	0.61	2.64	1.13	1.46	2.97	1.53	6.04 *		12.59 **
Disagree-Agree	0.22	1.59	0.88	0.83	1.59	0.71	21.54 **		9.88 *
Bad-Good	-0.52	1.56	0.75	1.28	1.82	0.42	53.70 **		26.55 **
… protect wildlife for children and grandchildren									
BE_Product	1.04	2.06	1.88	1.89	3.16	1.27	7.31 **		11.88 **
Disagree-Agree	-0.22	1.41	1.00	0.93	1.67	0.56	21.60 **		20.31 **
Bad-Good	-0.52	1.56	1.75	0.46	1.84	0.37	77.22 **		24.84 **
… bring foreign hunters to this area									
BE_Product	0.43	0.79	0.13	0.35	1.43	0.98	5.71 *		33.81 **
Disagree-Agree	0.26	1.25	0.38	0.52	1.57	0.80	3.81 *		24.87 **
Bad-Good	0.26	0.54	0.25	0.71	0.68	0.69	0.21	4.56 *	5.28 *

* $P < 0.05$ ** $P < 0.001$

The belief evaluation product (BE), which is the multiplication of the strength of the belief (agree - disagree scale) and the outcome evaluation (good - bad scale) ranges from - 4 to 4. Both the disagree - agree scale and the bad - good scale ranges from -2 to 2

4.4. Discussion

The intention of this study was to determine the level of support amongst local residents for the re-establishment of the Ntabethemba Reserve. While a number of studies have looked at residents attitudes to protected areas in general, other conservation related issues and even community conservation projects (Newmark *et al.* 1993; Fiallo & Jacobson 2009; Walpole & Goodwin 2002; Mehta & Kellert 1998), few have assessed local residents attitude towards the development of a community based conservation project. Even fewer have gone back to assess the attitudes of residents involved in a failed community conservation project.

The approach of interviewing a sample of randomly selected households from each village surrounding the abandoned reserve was used to get an indication of residents' attitudes, the influence that society has on their actions and their behavioural intentions towards supporting the re-development of the Ntabethemba Reserve. By doing so the study effectively provided some insights into the residents' viewpoints of the reserve without being influenced by the more prominent voices of authority figures. Additionally, the study was able to provide information relating to the community's social demographics and livestock usages. Ajzen & Fishbein's (1980) Theory of Reasoned Action served as a theoretical framework and a tool to develop a concise questionnaire that could illicit some answers for what became clear to be quite a contentious topic (Chapter 3). The ability to develop short, to the point, questionnaires using basic salient beliefs and referent groups allowed for timely interviews with high response rates. It was personally felt that this method reduced the levels of tension which respondents had towards the notion of discussing the topic of the Reserve. The downfall was that such a quick interview process did not allow for deeper insights into the project to be revealed.

Social Demographics

The social demographics of the study area are not unlike those of other former homelands in the Eastern Cape, with its high unemployment rates, low education and female biased population (Bank & Minkley 2005). Another typical factor affecting the rural areas of previous homelands is the absence of men within the working age groups (Bank & Minkley 2005). This is mostly attributed to the lack of adequate employment opportunities in the area resulting in men leaving to search for work elsewhere, such as mines, farms and cities. Lack of employment is also the most probable cause for the high level of respondents being reliant on government grants and pensions as well as the high probability of households falling below the national poverty line.

Livestock

Similar to the social demographics, the distribution and usage of livestock amongst households within the study area was comparable to other areas in the Eastern Cape's former homelands (Kepe 2002; Manona 1998), with the bulk of grazing livestock being owned by a few households while the majority of households do not own a single grazing animal. This factor greatly skewed the averages for head sizes as the largest herd of livestock owned was as high as 475 animals – almost 140 more than the next largest herd size. What was of interest to note was the high numbers of sheep in the area which, as reported (Figure 4.7), does not constitute the traditional livestock species of the amaQwathi. Sheep were also held at higher numbers than goats or cattle and should therefore mostly been seen as an economic commodity, rather than the complex socio-traditional aspect which goats and cattle have (Ainslie et al. 2002). Sheep owners would have the most to lose from having the Ntabethemba Reserve re-established. This is evident from the evaluations of the beliefs expressed by those who would not support the Reserve (Table 4.2) in that respondents indicated that the re-establishment would likely result in less land being available for livestock.

Support for the Reserve

Overall the study showed that a high majority (73.7%) of local residents interviewed would support the re-development of the Ntabethemba Reserve. The results were consistent with Ajzen & Fishbein's (1980) theory in that respondents' intent to support (behavioural intention) the reserve was significantly influenced by their attitudes to the project and the perceived social pressure (subjective norms). What is also consistent with the TRA and has been reported quite extensively (Manfredo & Bright 2008; Jhamvar-shingote & Schuett 2013) is that the attitudinal component had a stronger correlation (r = 0.91) and higher relative weight (β = 0.81) than that of the social component (r = 0.64; β = 0.16). No other factor, including respondents' attitude towards safari hunting on Ntabethemba, had any significant effect on the models prediction in variability.

A point which needs to be discussed is the lack of influence which livestock ownership was shown to have on respondents' intention to support the reserve. As a loss in livestock grazing area would be the greatest opportunity cost for the residents if the Ntabethemba Reserve were to be re-established, it would be assumed that the amount or even assigned value of respondent's livestock would influence their level of support. However, as Kepe (2002) pointed out, the importance of livestock is not only held by those who own it but also by those who aspire to own it or those who benefit from others livestock. Therefore, respondents who owned no livestock but still saw their importance or sought to one day own livestock would see the reserve as diminishing that possibility. Alternatively, those respondents who owned livestock but do not utilize the Ntabethemba Mountain for grazing would

have no opportunity costs associated with the reserve and would therefore be more likely to support it. Any future investigation into this matter must be sure to distinguish those who would have actual opportunity costs.

Attitudes to Hunting

Respondents' attitude to having safari hunters on the Ntabethemba Reserve had no impact on their intention to support the reserves re-establishment or not. Both those in favour (73%) of the reserve and those against it (13%) were positive about hunters coming into the area. There was a general feeling that hunters would bring better opportunities into the area:

> *"the hunter come here with a lot of money. When they leave they just take the horns and the skin and leave the meat… even now there are people coming to hunt on that mountain. There are many animals [game] there, they just walk with our cattle." (pers. comm. anonymous, local resident Kwezi village)*

Study Limitations

Although this study was able to provide some insight into the attitudes and subjective norms of the local residents surrounding the Ntabethemba Reserve, it should by no means be considered conclusive. This study only provided an insight into the proposed level of support from residents. While possible support amongst residents is high, there are still other factors which could still possibly cause complications for such a project. For instance the high level of contention around the topic of the Ntabethemba Mountain (which did not come out in this study but was felt during the interviews) suggests that there are other influencing factors which were missed and need to be considered. For instance, the high opportunity costs experienced by livestock owners if the reserve were to be re-established is one such factor which still needs to be investigated. An additional limitation to the study is that it was conducted in the month of March and so only included the residents of the area and not any migrant workers or extended family members. Such people could possible also influence the obtained results.

4.5. Sub Conclusion

The high potential support from amongst local residents towards the re-establishment of the Ntabethemba Reserve suggested a positive acceptance for any proposed future community based wildlife projects in the area. The use of safari hunting also seems to be a socially accepted land use option. However, care needs to be taken to consider additional factors that, while seeming unimportant for most residents, could have major impacts on the future of the project. The high opportunity costs that would be felt by livestock owners through the loss of grazing land if the Ntabethemba Reserve were to be re-established could possibly result in them opposing the project. Their status within the community places them in an influential position in which they could incite further opposition from amongst additional residents. Before any plans are made to reinstate the project a complete stakeholder analysis would need to be done. Strategic planning that includes local residents at various planning stages would need to be done in order to determine a solution to the loss of grazing lands. Additionally, future projects should not ignore the attitudes of local residents by thinking that the powers and influences of Tribal Authorities will be enough to convince them or outweigh their gripes. Often Tribal Authorities may seem to have the support from amongst residents, but as soon as there are a few influential residents who are not happy with the situation they can easily turn the community against the Tribal Authority. In such cases it is not uncommon to find the Tribal Authority figures completely change their views to be more aligned with the residents so as not to lose their status. In short, the complexities of the situation need to be kept in mind and sensitivity shown towards social statures, past political situations and views of residents themselves.

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Chapter 5: Conclusion

5.1. Key findings and Conclusions

The case of the community owned Ntabethemba Reserve tells a story very similar to other failed community based projects elsewhere in South Africa (Ainslie, 1999; Cocks *et al.*, 2001). The project's initial formation differs in that it was developed on communal land without the process of a land claim lodged towards a protected area or private game reserve, as is the case with many other CBC initiatives in South Africa (see Kepe *et al.* 2005). However, such as with the other cases, it eventually became an extension of the neighbouring protected area. It is therefore important to view the Ntabethemba Reserve rather as a 'joint-management' project as opposed to a true CBNRM initiative. The practise of simplifying social factors underlying the project and merely extending principles adopted through fortress conservation resulted in the reserve having a number of common pitfalls, such as; a 'top-heavy' approach to management, lack of empowerment amongst local residents, lack of adequately defined ownership for the proposed beneficiaries and an inefficient means of distributing benefits. Eventually the poor foundations, on which the project was built upon, gave way when political changes caused disruptions to the ruling governance and project authorities (chapter 3). Such cases have been well documented in the literature (Ainslie, 1999; Cocks *et al.*, 2001; Kepe *et al.*, 2005) and present no new findings to the study of community conservation.

What is of interest in this case study is the high level of support from amongst local residents for having the project re-established (chapter 4). One would assume that a project which is believed to have been railroaded at the hands of local residents would have very little support from that same group of residents, less than 10 years later. So either the local populace changed their views once realising the benefits of the project after it had been disbanded or there are factors missing which are not being considered. A thought here is that perhaps only a small percentage of the local population were involved in the reserve's collapse. However, even if it was possible to prove such a notion it would still not take into consideration the range of other factors which could also have had a contribution to the fate of the reserve. This case therefore builds on Allsopp's (2013) view that South Africa's communal rangelands be recognised for the complex socio-ecological systems that they are. Similarly, the reason for the reserves failure cannot be broken down into individual causes but should rather be seen in the light of complex systems.

Another interesting point uncovered was that respondents' attitudes had more influence on their intention to support the reserve's re-establishment than did their subjective norms (chapter 4). In a society which is governed by traditional customs and tribal authorities one would assume that the social pressures would have a greater influence. This raises an important point for organisations

attempting to initiate community based projects. Whether small scale agricultural or natural resources conservation projects, it is important to note that the current state of the traditional authority or 'headman' system is at a situation where it does not necessarily hold influencing power or ultimate governing authority over residents. The buy in from residents at a household or even individual level is an extremely important undertaking of any community project. Simply having the support and trust of the Traditional Authorities is not enough.

Additionally, what could also be seen from gauging the respondents' behavioural intention towards supporting the re-establishment of the reserve was that their attitude towards safari hunting had no significant influence on it. Respondents' overall belief toward the notion that the reserve would attract safari hunters was seen as positive by both supporters and protestors alike, similar was the belief relating to the reserve as being a protector of wildlife for future generations. Such findings sit well with Chaminuka's (2013) argument that wildlife should be seen as an alternative land use option on South Africa's communal land. While this study is by no means representative of all communal lands in South Africa, it does attempt to investigate what Chaminuka's (2013) paper does not raise – the actual attitude of local residents toward wildlife and the use of safari hunting on their land.

An interesting note that was uncovered in the study (chapter 3) is the persistence of non-indigenous game species on the Ntabethemba Mountain even after high levels of poaching caused the decline of almost all other indigenous species. The value of these species, not only in terms of their trophy price but also their ability to persist under current conditions as well as their limited availability elsewhere, needs to be recognised. If the re-establishment of the Ntabethemba Reserve is to be considered then investigations need to be made into the contribution that such animals can have for the project. Care needs to be taken to remain unbiased in such investigations and not be too caught up with the traditional teachings of biodiversity conservation, which might cause one to overlook the net value of the species.

5.2. Shortcomings

While the study has attempted to unpack some of the social complexities relating to the project, it has yet to look at them in the light of the areas of ecology or perhaps more importantly the economic aspects of the project. Due to the nature and political complexity of the area it was not possible to adequately investigate all aspects of the project which would be needed to create a clear picture of why the Ntabethemba Reserve failed. As the social aspect towards this project was the one which was least understood by management, it served as the most important aspect to start with. Additionally, the high level of contention relating to the community reserve created an environment which was unsuitable for conducting long, detailed interviews of a qualitative nature. Instead a short, to the point

questionnaire was developed in order to obtain a sufficient sample. More detailed, qualitative interviews with a larger sample size would possibly reveal further factors that could have added to the reserve's failure. Additionally, a larger sample size could also reveal more on the influence that livestock ownership has on respondents' attitudes and levels of support for the project.

Furthermore, it was not possible to retrieve any reports or financial records of the Ntabethemba Reserve leaving a number of unanswered questions relating to the project's financial success and benefit distributions. Further investigations into such sources might unlock more supportive or contradictory views as to what has been found in this study.

5.3. Recommendations

While the initial result of the high level of potential support amongst residents for the re-establishment of the reserve, and their favour towards wildlife and hunting suggests a positive outcome for the re-development of the Ntabethemba project, a warning must be raised in that there are no clearly defined reasons for its initial failure. Therefore, it will be necessary to take into account all the mistakes highlighted in this study and in other similar projects. Further studies would need to be conducted to investigate the economic and ecological contribution that game and the use of safari hunting would have in the area to understand if it is indeed the best land use for the Ntabethemba Mountain and the people who currently reside in the area.

If a future project is to be undertaken it needs to be aware of the complex socio-ecological setting of the area and account for this in ways that are beyond those advocated in the traditional approach to protected area conservation. The highly skewed distribution of livestock ownership needs to be taken into consideration in that those few individuals who own the most livestock would lose the most from any development that reduces grazing lands. Processes should be put in place right from the planning stages to account for livestock owners and their potential (perceived and actual) losses and solutions need to be sought from within each village using the input from livestock owners themselves. Most importantly though, any future project needs to generate conceivable benefits for the residents that will outweigh the costs associated with losing "their" land. Both the benefits and the costs need to be distributed in such a way that a situation is avoided where only a few are benefiting at the expense of others.

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Appendix 1: Questionnaire used in the house hold surveys

Date of First Visit: .....

Date of Interview: .....

House still in Existence:.....

Suitable Respondent Home and Available: .....

Appointment for Revisit: .....

Household Agreed to Participate: .....

Written Informed Consent Obtained:.....

Verbal Informed Consent Obtained:.....

Completed Successfully:.....

Name:.....

Gender:.....

Year of Birth: .....

Village:.....

A - DEMOGRAPHICS:

Firstly I want to start by asking you a few questions on your house hold so that I can see what type of a life the people in this community have?
Okokuqala ndizacela incukacha zasendlwini khonukuze ndazi ukubantu baphila njani abantu apha ekuhlaleni.

#	Name Igama lelungu laseKhaya	Surname Fani	Relation to H Head Ubudlelwane netloko yekhaya	Age Iminyaka	Level of Education Uphelelephi Esikolweni	Gov Grant Uyapeya? [Yes/No]	Main Occupation Yintoni Umsebenzi wakhe	City/Town of Occupation Idolophi asebenza kuyo	Income Contributed to HH Igalelo lakhe ngokwemali	Months Contributed Zingaphi iinyanga athumela ngazo	Months spent in Village Uhlala ixesha elingakanani ekhayeni
1.											
2.											
3.											
4.											
5.											
6.											
7.											
8.											
9.											
10.											
11.											
12.											
13.											
14.											

Relation to House Hold head					
F	Father (Tata)	**U**	Uncle (Malume/Tatomcinci/Tatomkhulu)	**Ne**	Nephew (Umtshana oyinkwenkwe)
M	Mother (Mama)	**A**	Aunt (Malumakazi/Dadobowa/Ncinci/Mamkhulu)	**Ni**	Nice (Umtshana oyintombi)
Br	Brother (Bhuti/Mntakwethu)	**So**	Son (Unyana)	**GS**	Grand son (Umzukulwana oyinkwenkwe)
Si	Sister (Sisi/Dadewethu)	**Da**	Daughter (Intombi)	**GD**	Grand daughter (Umzukulwana oyintombi)

B- HOUSE HOLD ASSETS

I would like to ask you about the things your household owns.
Ndingathanda ukuba sithethe ngezinto ezikhoyo endlwini.

Type of Dwelling (Material used for roof):		
Number of Rooms **Zingaphi ikamire:**		
Toilet Facilities:		
Does your House Hold Own **Umnikazimzi unazo ezizinto zilandelayo**	**YES/NO**	**Number**
Zingaphi izindlu (Any other Houses):		
Ikari yedonkie (Donkey/Horse Cart)		
Bicycle		
Imoto (Car)		
TV		
HiFi		
Computer		
DVD/Video player		
Washing Machine		
Oven		
Stove		
Cell Phone		
Land Line/Telephone		
Fridge/Freezer		
Microwave		
Umtshini wothunga iimpahla (Sewing Machine)		
Tractor		
Ikhuba (Plough)		
Irharafu (Spade)		
Fork Spade (Fork)		
Igaba (Hoe/Skoffel)		
Pick		

C- LIVESTOCK (Imfuyo):

Now I would like to ask you about the livestock your house hold owns.
Ndingathanda ukufumana ulwazi ngemfuyo

Yearly Income (2012)							
Livestock	Numbers	Usage [Key]	Current Price/Unit	# sold last year Ozithengisileyo Kunyaka ophelileyo	# bought last year Ozithengileyo kunyaka ophelileyo	# Died last year Ezifileyo ophelileyo	# Slaughtered Ozixhelileyo ophelileyo
horses							
donkeys							
cattle							
sheep							
goats							
pigs							
chickens							
dogs							
other							

Umsebenzi wayo/wazo (Usage)					
Mi	Ubisi Milk	**SL**	Thengisa sell live	**Wo**	Uboya Wool
Me	Inyama Meat	**Tr**	Isithuthi Transport	**TR**	Amasiko Traditional

Uchithe malini kwezizinto zilandelayo ngemfuyo yakho (Yearly Expenses for 2012)							
Livestock	Dip	Dose	Inoculation	Medication	Transport	Labour	Other

D- QUESTIONS:

Ntabethemba Mountain:

I would like to talk to you about the lodge and Game Reserve which use to be on the Ntabethemba Mountain.

Ndingathanda ukuthetha nge CellB/Lillyfoun tain lodge kunye nentaba yaseNtabethemba

Would you support the re – establishment of the Game Reserve on the Ntabethemba Mountain?

Uyavumelana nokuvuselelwa kweNtabethemba njengeziko lwezilwanyana kwakhona?

YES	NEUTRAL	NO

Kutheni usitsho (Why do you say this?)

.....

.....

Ingaba bakhona abanye abantu ukuba luvuseleleke ukhenketho apha eMaqwathini?

(Are there people who do not want you to support the re-establishment of the Gamer Reserve?)

.....

.....

Do you think Ntabethemba Reserve should manage by Tsolwana Nature Reserve, as in the past?

Ungathanda ukuba iphinde ibephantsi kolawulo lwaseTsolwana njengakuqala?

YES	NEUTRAL	NO

Kutheni usitsho (Why do you say this?)

.....

.....

Do you think the Ntabethemba Reserve should be marked to hunters, as in the past?

Ucinga ukuba ingaphinda ibe liziko lwabazingeli ngengakuqala?

YES	NEUTRAL	NO

Kutheni usitsho (Why do you say this?)

.....

E- BEHAVIOURAL BELIEFS

1. Ukubangaba kungavuselelwa iziko lezotyelelo kwintaba yaseNtabethemba. Ucinga ukuba.....?
   If the Game Reserve on Ntabethemba Mountain was started again. Do you think …..?

   1.1. Izakunika amathuba omsebenzi apha kule lali (It will provide jobs for the people of this village)

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Ndiyavuma kakhulu	Ndiyavuma	Andiqinisekanga	Ndiyala	Ndiyala kukhulu

   1.2. Izakuzisa inxhaso mali yokuphuhlisa lelali (It will bring in money to help with the development of this village)

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Ndiyavuma kakhulu	Ndiyavuma	Andiqinisekanga	Ndiyala	Ndiyala kukhulu

   1.3. Izakuzisa izimali zokuxhasa abafundi abapase ibanga lushumi beswele iimali zokuqeqeshelwa izakhono abaazifunayo?
   (It can generate money to assist matriculates from this village to further their education.)

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Ndiyavuma kakhulu	Ndiyavuma	Andiqinisekanga	Ndiyala	Ndiyala kukhulu

   1.4. Izakucutha amadlelo/iinkampi zokutyisa imfuyo.
   (It will mean there will be less land for you to graze your livestock)

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Ndiyavuma kakhulu	Ndiyavuma	Andiqinisekanga	Ndiyala	Ndiyala kukhulu

   1.5. Izakuxabanisa uluntu elalini. (It will cause fighting amongst people from this village)

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Ndiyavuma kakhulu	Ndiyavuma	Andiqinisekanga	Ndiyala	Ndiyala kukhulu

   1.6. Izakubuyisa iinyamakazi eluntwini. (It will bring back wild animals into this area)

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Ndiyavuma kakhulu	Ndiyavuma	Andiqinisekanga	Ndiyala	Ndiyala kukhulu

   1.7. Izakukhusela iinyamakazi ebantwaneni nasebazukulwaneni
   (It will protect wild animals for your children and grandchildren to see.)

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Ndiyavuma kakhulu	Ndiyavuma	Andiqinisekanga	Ndiyala	Ndiyala kukhulu

   1.8. Izakuzusa abazingeli bangaphandle apha ekuhlaleni. (It will bring foreign hunters to this area)

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Ndiyavuma kakhulu	Ndiyavuma	Andiqinisekanga	Ndiyala	Ndiyala kukhulu

F- OUTCOME EVALUATIONS:

2. Ukubangaba uphuhliso lwezokhenketho luqalisiwe
   If the Game Reserve on Ntabethemba Mountain was started again and it did …
   2.1. Luzakunika amathuba emisebenzi apha elalin. Oku kuzabe....?
   Provided jobs for the people of this village. Would this be …?

Very Good	Good	Neutral	Bad	Very Bad
Kukuhle kakhulu	Kukuhle	Andiqinisekanga	Akulungaga	Akulunganga kakhulu

   2.2. Kuzakuzisa iimali zokuphuhlisa lelani).Oku kuzabe....?
   Bring in money to help with the development of the village. Would this be …?

Very Good	Good	Neutral	Bad	Very Bad
Kukuhle kakhulu	Kukuhle	Andiqinisekanga	Akulungaga	Akulunganga kakhulu

   2.3. Zisa amathuba enxaso mali zokufundisa abantwana abaphumelele ibanga leshimu. Oku kuzabe....?
   Generate money to assist matriculates from this village to further their education. Would this be …?

Very Good	Good	Neutral	Bad	Very Bad
Kukuhle kakhulu	Kukuhle	Andiqinisekanga	Akulungaga	Akulunganga kakhulu

   2.4. Umhlaba wokutyisa imfuyo uzakubamncinci. Oku kuzabe....?
   Mean there will be less land for you to graze your livestock. Would this be …?

Very Good	Good	Neutral	Bad	Very Bad
Kukuhle kakhulu	Kukuhle	Andiqinisekanga	Akulungaga	Akulunganga kakhulu

   2.5. Kuzakubangela imfazwe kubahlali belali. Oku kuzabe....?
   Cause fighting amongst people from this village. Would this be …?

Very Good	Good	Neutral	Bad	Very Bad
Kukuhle kakhulu	Kukuhle	Andiqinisekanga	Akulungaga	Akulunganga kakhulu

   2.6. Kuzakubuyisa iinyamakazi apha kulendawo. Oku kuzabe....?
   Bring back wild animals into this area. Would this be …?

Very Good	Good	Neutral	Bad	Very Bad
Kukuhle kakhulu	Kukuhle	Andiqinisekanga	Akulungaga	Akulunganga kakhulu

   2.7. Kuzakukhusela iinyamakazi ebantwaneni nasebazukulwaneni. Oku kuzabe....?
   Protect wild animals for your children to see. Would this be …?

Very Good	Good	Neutral	Bad	Very Bad
Kukuhle kakhulu	Kukuhle	Andiqinisekanga	Akulungaga	Akulunganga kakhulu

   2.8. Kuzisa abazingeli bangaphandle kule ndawo. Oku kuzabe....?
   Bring foreign hunters to this area. Would this be …?

Very Good	Good	Neutral	Bad	Very Bad
Kukuhle kakhulu	Kukuhle	Andiqinisekanga	Akulungaga	Akulunganga kakhulu

G - NORMATIVE BELIEFS:

Igama lenkosana yalelali (What is the name of the headman in this village?)

.....

Igama lenkosi yale lali (What is the name of the chief of this area?)

3. Who are the people in favour of the development of the Game Reserve on the Ntabethemba Mountain?

3.1. Ucinga ukuba abantu basebuKhosini/BakwaChief bayavumelana noluphuhliso?

Do you think the Royal Family are in favour of the development of the reserve?

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Ndiyavuma kakhulu	Ndiyavuma	Andiqinisekanga	Ndiyala	Ndiyala kukhulu

3.2. Ucinga Iinkosana zona ziyavumelana noluphuhliso?

Do you think the Headman of this village is in favour of the development of the reserve?

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Ndiyavuma kakhulu	Ndiyavuma	Andiqinisekanga	Ndiyala	Ndiyala kukhulu

3.3. Ucinga abantu basekuhlaleni bona bayavumelana noluphuhliso?

Do you think most of the people in this village are in favour of the development of the reserve?

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Ndiyavuma kakhulu	Ndiyavuma	Andiqinisekanga	Ndiyala	Ndiyala kukhulu

3.4. Abantu bakaseburhulumenteni abalapha bayavumelana noluphuhliso?

Do you think the Government Council of this area is in favour of the development of the reserve?

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Ndiyavuma kakhulu	Ndiyavuma	Andiqinisekanga	Ndiyala	Ndiyala kukhulu

H - MOTIVATION TO COMPLY:

4. Ayabamamela ababantu?

   Do you listen to these people?

   4.1. Ubantu bakwaChief uyayilandela imiqathango/imiyalelo yabo?

   How often do you do what the Royal Family wants you to do?

Always	Almost Always	Neutral	Almost Never	Never
Ngalalonke iXesha	Exesheni elininzi	Andiqinisekanga	Andibamameli	Andibamameli konke konke

   4.2. Inkosona/Usibonda uyimamela imiyalelo yayo?

   How often do you do what your Headman wants you to do?

Always	Almost Always	Neutral	Almost Never	Never
Ngalalonke iXesha	Exesheni elininzi	Andiqinisekanga	Andibamameli	Andibamameli konke konke

   4.3. Ababahlali ubamemala ngalo lonke ixesha ene uyayenza imiyalelo yabo?

   How often do you do what the other people of this village want you to do?

Always	Almost Always	Neutral	Almost Never	Never
Ngalalonke iXesha	Exesheni elininzi	Andiqinisekanga	Andibamameli	Andibamameli konke konke

   4.4. Bona abantu base burhulumenteni uyazenza izinto abafuna uzenze?

   How often do you do what the Government Council wants you to do?

Always	Almost Always	Neutral	Almost Never	Never
Ngalalonke iXesha	Exesheni elininzi	Andiqinisekanga	Andibamameli	Andibamameli konke konke