

**A Case Study of Community-Based Natural Resource  
Management in Manavhela Community in Limpopo  
Province, South Africa**

by

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RESEARCH DISSERTATION

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## DECLARATION

By submitting this thesis electronically to the University of South Africa for the degree of Master of Science in Nature Conservation, I declare that the entirety of the work contained therein is my own, original work, and has not previously been submitted for a degree at this or any other university. All material contained herein has been duly acknowledged by means of complete references.

Student signature: 

Date: 24/11/2020

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## **DISSERTATION SUMMARY**

The theoretical and empirical framework of this study demonstrates the following: firstly, the success of a CBNRM programme relies heavily on the involvement of the communities; secondly, the targeted government policies enable the facilitation of CBNRM in various parts of Southern Africa; thirdly, the involvement of institutions that includes donors, government institutions, academic practitioners, NGOs and the private sector, is crucial; fourthly, capital, in the form of natural, physical, human and financial capital, is necessary in the planning, implementation and management of the projects; and fifthly, CBNRM projects include varied ecotourism products based on the natural capital availability. In this study, a qualitative research approach was followed, where the sample population included the Manavhela reserve management, the workers, and community representatives. Findings of the study provide insights into the way in which the CBNRM programme was implemented in the Manavhela community, detailing the challenges and/or successes that have been faced in the management of the programme. Some insights are also penned on the attitudes of the community towards resource conservation. The conclusion is that the Manavhela community remains aloof regarding the implementation and management of the nature reserve. This is contrary to the CBNRM model, which postulates that the community must be at the centre of the implementation and management of conservation programmes.

## **LIST OF ACRONYMS AND ABBREVIATIONS**

ADMADE	Administrative Management Design
CAMPFIRE	Communal Areas Management Programme for Indigenous Resources
CBFM	Community-Based Forest Management
CBNRM	Community-Based Natural Resource Management
CPA	Community Property Association
DEAT	Department of Environmental Affairs and Tourism
DFID	Department for International Development
DWNP	Department of Wildlife and National Parks
GTZ	German Agency for Technical Cooperation
IRDNC	Integrated Rural Development and Nature Conservation
KNP	Kruger National Park
MET	Ministry of Environment and Tourism
NGO	Non-Governmental Organisation
SANParks	South African National Parks
SAPS	South African Police Service
USAID	U.S. Agency for International Development
VCD	Village District Council
WESSA	Wildlife and Environmental Society of South Africa

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## CHAPTER 1

### INTRODUCTORY CHAPTER

#### 1.0 INTRODUCTION

The management of natural resources has always been a concern for humans (Smith, 1993). Since the advent of professional natural resource conservation practices in the 19<sup>th</sup> century, various models and policy options have been advocated to try and conserve nature (Armitage, 2005; Anthony 2006). With the realisation that natural resources were being destroyed by humans, initial conservation models and policy options supported the idea of separating communities from natural resources (Anthony, 2006). This was based on the understanding that by distancing communities from natural resources, the former's interaction with the latter would be minimised, leading to the latter's preservation.

Unfortunately, this model worsened the relationship between nature and the communities. People started illegally depleting natural resources at any opportunity possible, without care for the consequences, since the sense of ownership was lacking. As a result, earlier conservation models were later replaced by other models that advocated a more closely connected relationship between nature and community. This study builds on these models. Generally, because natural resources are being depleted in rural areas (De Beer, 2012), it is important to look into programmes that seek to help communities manage their natural resources by conserving them, while benefiting from their use. Such a study on conservation of natural resources by communities may help in the understanding of not only how the resources can be managed, but how such programmes can be successfully implemented and managed.

One programme used to manage natural resources is through community-based natural resource management (CBNRM), which is a policy goal for rural development that enables communities within their spatial boundaries to manage their natural resources (Blaikie, 2006). The CBNRM approach involves the management of water and forest resources, parks, as well as other natural resources, and is now commonplace across

most continents around the world. CBNRM seeks to encourage better resource management (Armitage, 2005). The fundamental principle of CBNRM is that resource users must be able to realise benefits from natural resources, in order for sustainable natural resource management to be achieved (Nelson & Agrawal, 2008). CBNRM plays an important role in resource conservation (Boonzaazier, 2012). The benefit of CBNRM is twofold: it improves livelihoods and achieves conservation goals (Mbaiwa & Stronza, 2011). Using this case, the study intends to provide a distinct understanding of how members of the community relate to their natural resources, and to what extent their conservation strategies resonate with sound CBNRM principles. The earlier environmental management theories like the Malthusianism and the common property theory put the people and the natural resources in opposition (Qin *et al.* 2020), the CBNRM theory selected for this study takes the researcher to the community which the essence of a sound qualitative social science research.

The setting of African communities is such that natural resources are common-pool resources, which are usually susceptible to the tragedy of the commons through inefficiency and overuse, and are therefore prone to depletion (Ostrom & Hess, 2007; Mutenje, Ortmann & Ferrer, 2011). There is therefore a great need for efficient, equitable and sustainable use of commonly owned resources in most African communities (Blaikie, 2006).

If common-pool resources are used sustainably, communities can achieve environmental conservation and socio-economic development (Medvey, 2010). Literature indicates that CBNRM increases conservation efforts and enhances positive attitudes towards resource management (Mbaiwa & Stronza, 2011; Mutanga, Vengesayi, Muboko & Gandiwa, 2015). Boonzaazier (2012) highlights the common belief that if communities have direct benefit and control over natural resource use in protected areas, they are likely to have some interest in conservation. If they are not involved, they might eliminate wildlife populations which they deem a threat to their livelihood practices. The implication of Boonzaazier's argument is that CBNRM significantly improves livelihoods and nature conservation.

While CBNRM seeks to conserve natural resources, a gap still exists between resource conservation and resource use in the context of resources within the control of

communities (Moeng & Potgieter, 2011). Resource users seemingly need to better manage their resources than they are doing currently, else the state of natural resources would be much better. As such, this study intends to investigate the natural resource conservation and resource use in one of the community-owned natural resource areas in the northern part of South Africa: Manhavela Ben Lavin Nature Reserve.

## **1.1 BACKGROUND TO THE STUDY**

Community-based natural resource management has been defined by several authors such as Adams and Hulme (2001), Turner (2004) and Fabricius and Collins (2007), as the collective management of natural resources by locals for the benefit of the community. In this context, the community is empowered to manage their own resources, and are actively involved in policy- and decision-making (Medvey, 2010). The same notion was highlighted earlier by Thakadu (2005), who posited that community empowerment could be achieved through the linking of economic and social development to natural resources. Donors have used this thinking to assist communities in capacity building and small enterprise building for communally owned businesses such as beekeeping in Namibia, tourism ventures and mushroom harvesting in China (Shackleton, Campbell, Wollenberg & Edmunds, 2002).

The community is therefore entitled to the benefits of the resources adjacent to, or in, their area of settlement. The principle of CBNRM entails that authority over land needs to be decentralised, and this empowers people at grassroots level (Boonzaaier, 2012). For CBNRM initiatives to be successful, however, there should be cooperation between the government, the private sector and other non-governmental organisations (Medvey, 2010). Examples of areas in which initiatives of CBNRM could be practised, are forests, open woodland or grasslands for livestock grazing, wood supply, medicines, farm land, wildlife for game meat and safari incomes, fish in freshwater lakes, and aquifers, tanks and irrigation channels for domestic and livestock water supply and irrigation.

The pre-independence era in most African countries was dominated by protection of conservation areas by fences which continued even after independence. The downside of this model was that it separated the local communities from nature. The fencing out of

communities restricted households from collecting necessities such as firewood and thatching grass, in favour of conservation. In some instances, this meant that people were moved from their native settlements without proper land substitution (Boonzaazier, 2012). Furthermore, the need to revise this 'separation' model emanates from a lack of will by the communities to curb criminal activities such as poaching, and the general discontent of community members due to exclusion from policy-making and participation. What could also have contributed to the revision of the model was pressure exerted by human rights and justice-orientated groups, to change the expropriation style that favoured biodiversity conservation above communities (Boonzaazier, 2012). There was therefore a need to re-evaluate the principles of conservation held in the past to those informed by indigenous African tradition, as highlighted by Carruthers (1993).

The post-independence era has brought about the birth of CBNRM initiatives in Africa. The Botswana Okavango Delta is one example of such an initiative, and literature confirms that CBNRM substantially improved livelihoods and nature conservation after independence in the Okavango area (Mbaiwa & Stronza, 2011). A similar programme was implemented in Zimbabwe, widely known as the Communal Areas Management Programme for Indigenous Resources (CAMPFIRE). The programme was designed in a way that used wildlife and other resources to promote decentralised, rural, institutional control and management of livelihoods (Taylor, 2009). The basis of the formation of CAMPFIRE was to ensure decentralisation rights to access benefits from community natural resources. Taylor (2009) further explains that the programme was aimed at conserving and exploiting natural resources, wildlife, forests, grassland and water. Additionally, the programme focused on non-consumptive ecotourism ventures, timber and bamboo harvesting, mopane worms, and the sale of non-renewable resources such as river sand for construction.

In South Africa, the post-apartheid era has seen the establishment of new policies that emphasise citizen participation in natural resource management. The country is a signatory to numerous international environmental agreements that are supportive of community-based approaches (Blaikie, 2006). Some of the successful initiatives in the

country include the 'transform programme' in Malamulele, Blyde River and Richtersveld, whose aim is to assist rural people in making use of their natural resources in a way that brings about tangible economic, spiritual and cultural benefits (Department of Environmental Affairs and Tourism (DEAT) ..., [n.d.]). The Makuya Nature Reserve is another example of the CBNRM model where all natural resource management decisions are discussed and agreed on by a forum which is representative of all the stakeholders: the provincial government, Limpopo Tourism and Parks (LTP), the local community and South African National Parks (SANParks). The study area, Manavhela Ben Lavin Nature Reserve is part of this CBNRM initiative, where community members have a wildlife park as part of their natural resources and livelihood in terms of customary law (Okumbor, 2010).

## **1.2 PROBLEM STATEMENT**

It has been suggested that CBNRM seeks to encourage better resource management (Armitage, 2005) and improve community livelihoods (Boonzaaier, 2012). Some studies, for example Nelson and Agrawal (2008), show that for sustainable resource management to be achieved, the users must benefit from the resources. This applies mostly to the resources which are prone to overuse (Ostrom & Hess, 2007). Unsustainable use and over-reliance on natural resources prone to overuse by rural communities has contributed to the decline of the natural resource base (De Beer, 2012). Whereas advocates of CBNRM, as well as governments in developing and middle-income countries, increasingly aim to engage and involve communities, in order to protect natural resources, much of this remains not only theoretical, but also on government policy documents, without factual implementation (Cocks, Dold & Grundy, 2001). Where implementation has taken place, scientific assessments of CBNRM practices, patterns, attitudes, strengths, weaknesses, opportunities and challenges remain non-exhaustive.

Manavhela Ben Lavin CBNRM is one initiative that has not yet been scientifically studied in South Africa, yet it has existed since 2002. The fact that this initiative has been running for almost two decades is a potential sign that Manavhela Ben Lavin is one successfully implemented CBNRM initiative. More signs of success can be proved by the fact that the reserve has roads that may be travelled both day and night in the midst of very dense

bush, and has retained its status as an ideal stopover for many travellers. Yet, the success of the CBNRM may not only be the issue. The challenges experienced, in spite of the continued running of the CBNRM initiative, are something worth studying. Yet again, and perhaps more importantly, the Manavhela Ben Lavin, at initiation at least, had a tripartite style of operational management, consisting of the Ben Lavin Trust, the Wildlife and Environmental Society of South Africa (WESSA) and the Manavhela community. Could such a partnership be ideal for CBNRM or communities need to manage natural resources without any partnership or assistance from other civil society organisations?

### **1.3 RATIONALE AND JUSTIFICATION**

Considering the intensity of natural resource degradation worldwide, it will be interesting to know how Manavhela community is still managing their natural resources. Poaching is also a cause of concern countrywide in South Africa, and in this context the study will unearth how CBNRM has helped the community coexist with wildlife. There is extensive literature on CBNRM in the region, in general, and in South Africa in particular (Anthony, 2006; Nelson & Agrawal, 2008; Taylor 2009; Medvey, 2010; Romañach, Lindsey & Woodroffe, 2011; Boonzaaier, 2012; Mutanga, Vengesayi, Muboko & Gandiwa, 2015). There is nothing on CBNRM in the Manavhela community, but it seems to be successful in managing its natural resources, as has been articulated in the problem statement above. Anthony (2006) posits that it cannot be generalised that findings from one study can be applied in another context. Because cases are most likely to differ between protected areas, research on Manavhela community is justified. The reason to carry out this study is basically to assess the way Manavhela has managed to successfully conserve its natural resources for over a decade.

### **1.4 AIM AND OBJECTIVES**

The aim of the study is to explore how CBNRM practices can successfully be implemented and managed with a simultaneous and/or inherent objective of conserving natural resources prone to overuse, using Manavhela Ben Lavin as a case study.

Specifically the study intends to do the following:

- Assess the implementation and management of CBNRM in Manavhela.
- Assess the challenges of CBNRM versus the management processes in place that either overcome these challenges or assist in making sure that the CBNRM remains a going concern (in spite of challenges).
- Determine how the CBNRM has influenced the community's attitude towards natural resources.

## **1.5 RESEARCH QUESTIONS**

This research seeks to enhance the understanding of community natural resource management in Manavhela. The research questions guiding this study are as follows:

- How was the implementation of CBNRM done in Manavhela?
- What sort of management practices are in place?
- What are the challenges and success factors faced by CBNRM in Manavhela?
- How are these challenges overcome by the nature of implementation that established the CBNRM in Manavhela?
- What sort of management practices are used to overcome and cope with challenges to ensure the CBNRM remains a going concern?
- How has the CBNRM influenced the community attitudes towards natural resources?

## **1.6 ORGANISATION OF THE STUDY**

This research study comprises of five chapters, namely the following: introduction and background, literature review, description of the research design and methodology, presentation of data, analysis and research findings, and conclusion and recommendations.

Chapter 1 has encompassed the statement of the problem, purpose of the study, rationale and justification, as well as limitations of the study.

Chapter 2 reviews the emergence of CBNRM initiatives in South Africa and in the Manavhela community in particular. It also details the management of natural resources, and explores the relationship between the community and protected areas.

Chapter 3 gives a description of the research methodology, in which the researcher will solicit information from key informants by the use of interviews and secondary data sources.

Chapter 4 looks at the case study presentation and analysis of the results of the research.

Chapter 5 summarises and concludes the research paper by way of providing lessons to be learnt from CBNRM in Manavhela, and also recommendations for next steps.

Appendices will be used to report some additional information.

## **1.7 CONCLUSION**

This research explores how CBNRM practices can successfully be implemented and managed with a simultaneous pursuit of natural resource conservation, which is prone to overuse, using Manavhela Ben Lavin as a case study. Some successful programmes include, among many others, the transform programmes in Makuleke, Blyde River and Richtersveld, Okavango in Botswana, and CAMPFIRE in Zimbabwe. Manavhela Nature Reserve was selected as a case study in order to understand how CBNRM practices can be successfully implemented and managed. The succeeding chapter will present the review of literature from scholars and researchers on the various aspects of CBNRM programmes around the world.

## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **2.0 INTRODUCTION**

The literature review chapter discusses both the theoretical and empirical evidence relevant to the subject of this study. The theoretical literature review section examines the CBNRM as a concept, based on the common property management theory, the devolution of power in CBNRM, and institutional arrangements in the implementation of the initiative. The greater part of the literature section covers empirical evidence on the history of conservation in Africa, emergence of CBNRM in Africa, and rural livelihoods relating to the implementation of CBNRM in various countries, specifically in Southern Africa and India. The observations of various authors will be used in exploring the above areas. The chapter is discussed in three interconnected parts: firstly, the discussion delves into the common property theory which examines the CBNRM concept; secondly, the discussion will look into how the CBNRM was implemented in various parts of Southern Africa, with the associated challenges and how the implementers overcame these setbacks; and thirdly, the discussion will review literature on the attitudes of communities towards natural resources.

The reviewed literature is relevant to this study, in terms of firstly positioning it in the extant literature, secondly, in terms of showing the gaps of CBNRM that exist, which this research is attempting to address, and thirdly, in terms of laying down a definitional framework. For instance, the concept of the CBNRM is expounded on in section 2.3, and the gaps are given in the conclusion, after going through the literature. Other concepts such as the Common Property Resources are also briefly considered.

#### **2.1 HISTORY OF CONSERVATION IN AFRICA**

Heavy reliance by African communities on natural resources for their livelihood is one of the causes of reduction in biodiversity (Anthony, 2006). This made it necessary for natural resource conservation to be considered on the continent. South Africa, for instance,

gazetted an Act in 2003 that seeks to protect and conserve South Africa's biodiversity and natural resources (South Africa, 2004). The initial ideology of conservation was animal preservation that excluded humans, which was popularly known as 'fortress conservation'. This was done by setting up dividing fences to separate humans and wildlife (Anthony, 2006). In some cases, initiatives to conserve the natural resources include criminalising communities for harvesting any resources in protected areas (Dressler, Büscher, Schoon, Brockington, Hayes, Kull, McCarthy & Shrestha, 2010).

Conservation and development approaches in the developing world intensified at the end of the Second World War, under the initiative of international donors. The initiatives benefited mostly the elite, as well as tourism and conservation goals (Dressler *et al.*, 2010). Thakadu (2005) asserted that the alienation of local communities from their natural resources was the fashion of historical natural conservation in Africa. However, the socio-economic and political lives of rural communities hinged on the natural resource base. It hedged them against poverty, unemployment, health risks and seasonal famine.

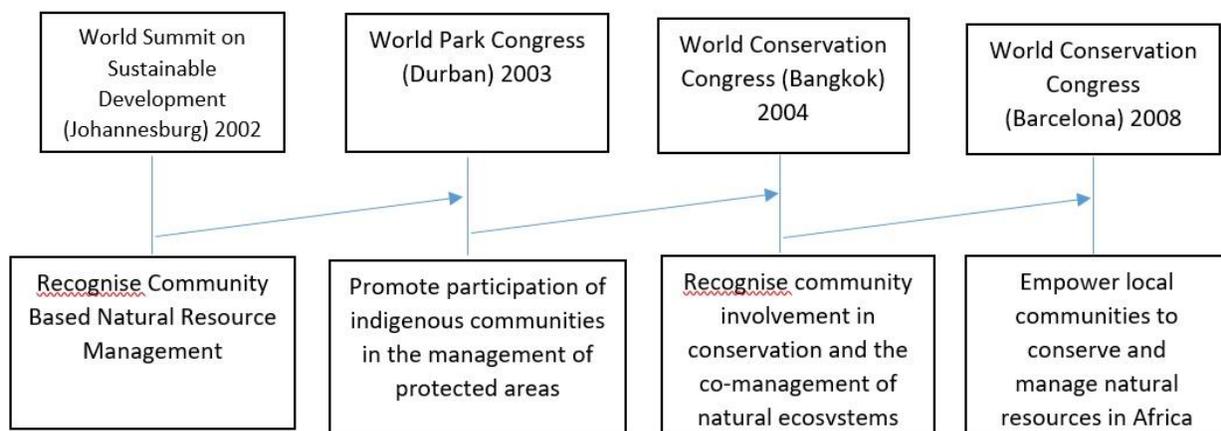
Fortress conservation, which was coercive in nature, did not bring about the intended result of reducing biodiversity loss. Instead, it brought disharmony between conservation agencies and locals, because the people living close to parks were dispossessed against their will, and denied access to the natural resources they believed belonged to them, leading to conflicts (Whande, 2007). In some cases, the fortress conservation initiatives were inefficient, and natural resources continued to decline (Thakadu, 2005). Before the democratic government in South Africa, the forceful removal of rural residents without compensation in order to proclaim protected areas, resulted in misery, hostility and negative attitudes towards protected areas (Thakadu, 2005; Whande, 2007; Dressler *et al.*, 2010).

## **2.2 EMERGENCE OF COMMUNITY-BASED CONSERVATION**

The realisation of the shortfalls of fortress conservation ushered in a more people-centred approach, known as community conservation (Anthony, 2006). This led to the revision of the approach to local community empowerment by linking social development to natural

resource management (Whande, 2007). This changed the face of conservation to that which includes participatory engagement, indigenous knowledge and community needs, which would result in the attainment of the main objectives of biodiversity conservation, poverty reduction and social justice (Dressler *et al.*, 2010). In this approach, conservation starts with the community, since it deals with the resources on a daily basis. The community tends to possess unique knowledge on potential resource uses, trends, opportunities, and dealing with adverse practices and dynamics. In this approach, the local residents are then viewed as partners, not as adversaries, in resource conservation from whom all other actors learn (Dressler *et al.*, 2010). It is therefore assumed that communities will change their behaviour and support conservation initiatives, because they benefit from wildlife.

De Beer (2012) highlights that CBNRM owes its emergence to the Council of Churches' deliberations held in Budapest in 1974. The concept was later supported in 1992 by political leaders through the endorsement of Agenda 21. One of the principles of Agenda 21 spelled out the rights of indigenous people in development, capacity building, and empowerment of the poor and women. It can therefore be acknowledged that the support for sustainable development played a role in the emergence of CBNRM. Figure 1.1, below, adapted from De Beer (2012), shows the progression of the concept of community participation in conservation:



**Figure 2.1:** Recognition of community participation in conversation. (**Source:** Adapted from De Beer, 2012:558).

The CBNRM programmes were initiated in Southern Africa, pioneered by the CAMPFIRE programme in Zimbabwe, and followed by Administrative Management Design (ADMADE) in Zambia (Sebele, 2010). At its inception, it was focused on wildlife management and empowering communities within and surrounding wildlife-rich areas. Subsequently, the concept spread, and covered a diverse range of resources such as veld products, rangelands, and marine and coastal resources (Löwegren, 2013). The CBNRM initiatives offered a holistic development approach that tied together economic benefits, resource conservation and development of local institutions (Ogbaharya, 2006).

### **2.3 CBNRM CONCEPT**

The CBNRM concept is based on the theory of common property management (Turner, 2004; Löwegren, 2013). The typical understanding is that the natural resources associated with CBNRM are usually common-pool resources (Measham & Lumbasi, 2013). Previous studies have reported that common-pool resources are prone to misuse, due to inefficiency and overuse by those who have access to them (Gardner, Ostrom & Walker, 1989; Ostrom, 2001; Ostrom & Hess, 2007). The presumption is that if individuals jointly use natural resources such as grasslands, land and forests, they tend to invest less in the resources, and in fact draw more for themselves (Gardner *et al.*, 1989). There is a need, therefore, for intervention by either the resource users or the external authorities (Ostrom, 2001). The CBNRM concept then seeks to promote ownership, control and use of the common-pool resources by the local community (Arntzen *et al.*, 2003; Löwegren, 2013). Building on the common property management theory, CBNRM created some institutional frameworks that provided an effective model for sustainable use and management of common-pool resources.

Common property theory entails that the common goods can be managed successfully through the development and maintenance of self-governing institutions (Yami, Vogl & Hausera, 2009). The conventional understanding on common goods was that privatisation or state regulations was the best approach to curb the sustained degradation

of natural resources. However, common property theory argues that natural resources are managed better through common property or co-management institutions. There has been progress made in identifying different institutional approaches to natural resource governance, since the implementation of the theory (Sick, 2008). Further, the institutions that promote the goals of the common property theory are seemingly participatory in nature and operate at grassroots level. They provide a comprehensive framework for policy-makers, practitioners and planners who seek to address environmental and social development goals.

The common property theory expresses that the commonly shared resources, which include rangeland for pasture, forests, fisheries, water and wildlife, are collectively managed, rather, because the resources are subject to shared uses. Thus, these resources become a common good, and it is untenable for them to be managed individually. Turner (2004) asserts that, in Southern Africa, the commonly shared resources are fast depleting. Hardin (1968) termed this the tragedy of the commons, a situation whereby in a shared resource system, individuals do not behave collectively towards the use of a common good, but instead act for their own self-interest. Campbell and Shackleton (2001) posit, nonetheless, that collectively owned resources can be managed successfully. This can be done through rules that apply in the management of common property, that range from national to local regulations, both formal and informal. For example, in some communities, the widespread sale of forest products is prohibited and is regarded as socially unacceptable.

Sick (2008) posits that the common property management theory is composed of institutions that have socially constructed systems of norms and rules that allocate rights, limit access, and regulate use of commonly held resources. Sunderlin and Gorespe (1997) identified the institutions in the co-management of fisheries in San Miguel Bay, Phillipines, as the government institution and the community institution. Each institution had a distinct role in the management of resources. The role of the government as an institution that co-managed the fisheries was that of being administrative and providing infrastructural capabilities that did not exist at community level, while the community institution contributed their indigenous knowledge.

Similarly, CBNRM used institutions in the implementation of its initiatives. During the implementation of CBNRM in the Okavango Delta of Botswana, the institutions involved included the state, through the Department of Wildlife and National Parks, international donors through USAID, and the community institutions through the *kogtla*<sup>1</sup> forum (Fabricius, Koch, Turner & Magome, 2004; Thakadu 2005). The CAMPFIRE programme in Zimbabwe was implemented by the government institution represented by the Department of National Parks and Wildlife Management (Child, 1996; Nelson 2012). Technical support was provided by academics from University of Zimbabwe, Zimbabwe trust and the World Wide Fund for Nature (Taylor, 2009). In the community institution, the Rural District Councils worked closely with Ward development committees, chiefs, headman and *sabhukus*<sup>2</sup> (Nelson, 2012).

The foregoing examples show that common-pool resources need to be carefully managed by institutions that are participatory, collective and grassroots-orientated, so as to address the environmental and socio-economic development (Sick, 2008). It is recognised that local users have intimate knowledge and greater concern for the resources they depend on for their livelihoods, hence they in turn conserve the resources. Because the communities live among the resources, they easily notice any changes in resource conditions, and would act more swiftly to manage change, compared to the distant and bureaucratic government agencies. The common property regimes are a necessity to help secure livelihoods and reduce poverty, because they are granted property rights. Collaborative decision-making in common property rights regimes allows for greater exchange of information that can lead to improved governance (Sick, 2008).

To effectively manage the common pool resources CBNRM emphasised the following:

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<sup>1</sup> Kgotla - a public meeting, community council or traditional law court of a Botswana village. Usually headed by the chief or headman, community decisions are always arrived at by consensus.

<sup>2</sup> Sabhuku - the village head, chairs the village assembly as well as the village development committee. The Sabhuku reports to village headman. Village is lowest unit of organisation in rural Zimbabwe. Sabhuku holds office by succession and for life.

- Promoting resource ownership by giving the resource users secure rights over resources (Löwegren, 2013), which gave them a sustainable livelihood (Ogbaharya, 2006).
- Collective management of the resources by local community and partners (Sick, 2008).
- Transfer of power over the resources by the state to the community, so that the common-pool resource users will plan, allocate, manage, and benefit from, the resource they live in (Agrawal & Gupta, 2005; Ogbaharya, 2006; Yami *et al.*, 2009).
- Empowering the traditional leadership system by accepting them as a legal entity that has the power and capabilities to manage common-pool resources (Ogbaharya, 2006), in the form of the inclusion of headmen and sabhukus in decision-making processes.

Collective management of common-pool resources that includes indigenous people, has proved to be effective in protecting natural resources and improving livelihoods (Sick, 2008). There have been some success stories in the management of common-pool resources through CBNRM. Boudreaux and Nelson (2011) highlight an example of a successful CBNRM case in Namibia, where locally managed wildlife produced positive outcomes such as rural economic development, a healthier environment and improved local governance. Moreover, there has been a substantial contribution to the community livelihoods, as well as resource conservation, in the delta of Botswana by the CBNRM projects (Boonzaaier, 2012). However, there have been challenges to the management of CBNRM, emanating from various factors. For example, in the management of the CAMPFIRE programme in Zimbabwe, both national policies and household strategies have provided challenges in resource management (Campbell, Mandondo, Nemarundwe, Sithole, De Jong, Luckert & Matose, 2001).

State policies governing control and use of woodlands were not enabling sustainable management of resources at local level. The Communal Land Forest Product Act restricted the use of woodland resources by local people, while allowing outsiders to exploit the resource through resource-use permits obtained from state agencies,

bypassing village structures. Further, when power was transferred from the state, the control of resources was given to the district council and not to the local community. Due to the unwillingness of the district council to allow communities to participate in the planning and management of wildlife, hostility towards the programme developed.

## 2.4 DEVOLUTION OF POWER

The theory of decentralisation involves the transfer of powers by the central government to lower-level institutions (Tacconi, 2007). In CBNRM it denotes the transfer of control over natural resources from central government to local communities (Shackleton *et al.*, 2002; Tacconi, 2007; Nelson 2010; Boonzaaier, 2012). The devolution of power theory has been the prevailing discourse for environmental management processes, and such reforms act as an incentive to local communities to invest collectively in natural resources (Boonzaaier, 2012). Further, if communities are given authority over land and natural resources, the assumption is that they will manage it sustainably. On the contrary, if communities are not actively involved in managing the resources, they would eliminate wildlife populations and other resources, thus reducing the community livelihood base. An example of different institutional arrangements that were used to achieve the devolution goals, are summarised in Box 1

**Box 1:** The organisational foundations of devolution.

The types of organisations that exercised 'local' authority (through devolution) and the direction and degree of their accountability had a strong influence on whether the outcomes of devolution policies were favorable for local people or not. The following organisational models were identified amongst the different cases:

- **District organisations.** These included local government organisations such as Rural District Councils in Zimbabwe and panchayats in India, and multi-stakeholder district structures aligned to line departments such as Wildlife Management Authorities in Zambia and forest farms in China. The measure of downward accountability varied from very little (CAMPFIRE and Zambia) to modest (as among panchayats in some parts of India).

- **Village committees** facilitated by government departments, e.g. Village Natural Resource Management Committees in Malawi and Forest Protection Committees in India. Here, accountability related to the degree of control transferred by the state (in Malawi and Tanzania committees could formulate their own by-laws, while committees in Zimbabwe and much of India and the Philippines were weak and largely controlled by forestry officials) and the extent to which local élites captured the process.

- **Corporate, legal organisations** composed of all rights holders and/or residents, e.g. Trusts (Botswana), Conservancies (Namibia), Communal Property Associations (Makuleke, South Africa), Villages (Tanzania), and Range Management Associations (Lesotho). Since the foundation and legitimacy of these organisations derived from the

community itself, interference by the state was less pervasive than in the preceding arrangements, but it still retained ultimate authority and continued to make decisions with negative impacts on local interests.

- **Household-based and individual management** in China and the Philippines, where individuals exercised varying degrees of authority over species selection, harvesting practices, sale and consumption, and the distribution of benefits. The state maintained its control through providing access to processing technology, permit systems, planning requirements and fees and taxes.

- **Self-initiated organisations** that operated outside the state hierarchy. Cases ranged from traditional leaders in Zimbabwe (Chivi case), to Residents' Associations in South Africa (Fish River case), and share-holding schemes in China. Self-initiated schemes often were accountable to disadvantaged resource users (e.g. Orissa, India), but were co-opted by elites or officials in the absence of a supportive policy and legal framework. Where these organisations were representative and accountable, a lack of official support often limited their effectiveness in achieving sustainable and equitable NRM.

(Source: Shackleton *et al.*, 2002:3).

There has been consensus among various authors that in all CBNRM initiatives, some efforts were made to transfer power from central government to local communities (Shackleton *et al.*, 2002, Tacconi, 2007, Boonzaaier, 2012, Nelson, 2012). However, contrary to the rhetoric of the theory, in most cases the government remained the steering agency of the resource management agenda, except where there has been a strong presence of NGOs and donors (Shackleton *et al.*, 2002). Accordingly, some communities feel that the devolution policies have not lived up to their promises. Thus, it is believed that they only provide limited benefits. Some examples of such experiences can be noted in Asia and Southern Africa. In Zambia and India, though, there has been improvement in the access to subsistence products, but other important resources such as fuelwood and game were still restricted. In the Makuleke community in the Kruger National Park (KNP), communities were given rights over tourism-based benefits only. In Zimbabwe and India, timber and non-timber forest products were reserved for state management.

In the Asian countries, the forestry department promoted only timber and agro forest species in which the state has an interest, and ignored species valued by poor communities for medicine, fodder, craft material and wild food. While numbers of game animals grew in Namibia, their destructive effects on the communities' crops and livestock was not considered. In all these cases, it can be concluded that the communities have very limited rights over resources – which does not concur with the devolution policies of CBNRM. Consequently, some initiatives have failed, and their failure could be attributed to not giving significant rights over resources to local communities, by the central

government (Shackleton, 2002; Nelson, 2012; Shackleton, 2002). Additionally, lack of good governance in most countries has led to exploitation of the communities by the local elite groups who manipulate the institutions and opportunities created by decentralisation for their own benefit (Boonzaaier, 2012, Nelson, 2012).

## **2.5 CBNRM INSTITUTIONS**

### **2.5.1 The community institution**

The local community has vast knowledge about their landscape, thus placing them as the best parties to conserve the resources (Fabricius *et al.* (2004). For the CBNRM to achieve its goals, there is a need to recognise the importance of existing traditional leadership and the importance of indigenous knowledge, in natural resource management. Fabricius *et al.* (2004) assert that CBNRM needs to be sensitive to the role of spiritual ecology, as it has great influence on community perceptions regarding the use of certain resources and features of the landscape, and the fact that village chiefs play a role in resource-use regulation. An example is specific days set aside, where tilling on the land is prohibited in KwaZulu-Natal. Thus, villagers do not till the land on Mondays and Saturdays.

Participation of the community in planning is believed to enhance local support for biodiversity conservation in protected areas, and decrease conflict between local people and parks (Anthony, 2006). Moreover, the importance of traditional leaders was visible in the CBNRM in Zambia and Lesotho, where the chiefs were excluded from the implementation and management of natural resources, and this proved to be counterproductive. In the Okavango Delta in Botswana, the CBNRM approach failed to incorporate differences in ethnicity, thereby getting little support from traditional leaders. Yet, in the Makuleke conservancy, the CBNRM has had a positive impact in promoting people's welfare, due to strong traditional leadership (Shackleton *et al.*, 2002). To effectively plan and manage natural resources in protected areas, local people's worldviews and associated values should be considered, because their values inform their choices.

Gadgil, Berkes and Folke (1993) highlight that indigenous knowledge is an important part of conservation, and a special feature that promotes continuity in resource use practices. Berkes (2004) acknowledges that knowledge is a powerful tool, and the use of local and traditional ecological knowledge is a mechanism for co-management and empowerment. For instance, the communities of Okavango Delta live in a volatile environment that is marred with flooding, droughts, animal migration and seasonal fluxes. However, due to exceptional knowledge and adaptation, the community has managed to deal with the constant change in their ecosystem (Fabricius *et al.*, 2004). Further, some of the strategies that the communities have adopted include nomadic lifestyle, reliance on social and financial capital, and adaptive ecosystem management. It is, however, noted that due to the introduction of government policies, emergence of new markets, migration, mixing with external people, and also education, the indigenous knowledge and religious practices that were used to maintain biodiversity have disappeared (Mutenje *et al.*, 2011). The influence of government, by their policies and regulations, deflates the efforts of community institutions in forest use and management. The efforts of indigenous people should be recognised for the effective management of forest ecosystems, as their management and knowledge is based on their time-tested management practices.

### **2.5.2 International agencies and donors**

The need for donors in the planning and facilitation of CBNRM projects is central; they provide funds that are necessary for the management of the projects. To empower the local community, CBNRM has placed emphasis on the linking of economic and social development to natural resources. These agencies attached conditions to their funding that forced governments to change their policies towards the needs of the communities, which was a positive move for the communities. However, they lacked local knowledge, and their programmes negatively affected the poor. Nelson (2012) further adds that the spread of community-based approaches to conservation has been largely influenced by foreign development aid agencies, including multilateral organisations and many other donor agencies such as the World Bank, the U.S. Agency for International Development (USAID), the Department for International Development (DFID) and the German Agency for Technical Cooperation (GTZ). USAID tends to have a greater interest in biodiversity

conservation, while European donors generally prioritise poverty reduction and the social dimensions of local participation in resource governance (Nelson, 2012).

### **2.5.3 NGOs**

The state organs took advantage of the availability of NGOs, and used them to implement the CBNRM projects. They became an important part of the implementation and management of the projects, as they played roles such as facilitation, capacity building, and neutralising conflicts and differences that existed between state organisations and communities (Shackleton *et al.*, 2002). Such arrangements existed in India and the Philippines where the state transferred responsibilities such as building, technical and financial capacity, addressing inequalities, gender equity and development of communication networks to NGOs. In the Makuleke conservancy, in the conflicts between the community and the South Africa National Parks Board (SANParks), the NGOs were the negotiators. In most instances, the NGOs demonstrated far greater commitment than state organs in community empowerment and finding the balance between community needs and resource management concerns (Nelson, 2012).

In Botswana, the NGOs helped communities prepare their management plans, and lobbied to get their trusts registered, and trained communities in different skills ranging from knowing their legal rights to use of fuel wood saving devices (Fabricius *et al.*, 2004; Thakadu, 2005). Further, they provided technical information on forest management and product management in India and Philippines. Their efforts looked positive in the communities' eyes, but they sided with the state and created dependence rather than empowerment. Since they acted as local people's representatives and gatekeepers to the world, they sometimes pushed communities into decisions they may otherwise not have taken.

### **2.5.4 State institutions**

Shackleton *et al.* (2002) posit that the state, which includes the local government and various departments, had an interest in the outcomes of natural resource management initiatives, and it was their role to promote positive outcomes for communities from

devolved natural resource management. For example, the Panchayats in India played a greater role in accounting for the advantaged groups, compared to other non-state organisations. In some cases, for example, the local council in CAMPFIRE Zimbabwe ignored the community's institutional arrangements, and in fact competed with the communities for natural resource control and use.

### **2.5.5 Private sector institutions**

According to Shackleton *et al.* (2002) the private sector helped the community in income generation, and provided capital and expertise, and created platforms for the people to access markets. Nevertheless, there was little benefit for the community by the involvement of the private sector, mainly due to state involvement in private sector decisions. Some small business operators exploited the resources, causing conflicts with the local people, as some were outsiders, and ignored local regulations and controls, such as wood carvers, charcoal and medicinal traders and traditional healers. They used natural resources and did not pay for them.

## **2.6 CBNRM AND RURAL LIVELIHOODS**

The natural resource base that CBNRM aims to govern is one of the foundations of rural livelihoods (Fabricius *et al.*, 2004). These resources, popularly referred to as 'everyday resources' by Fabricius *et al.* (2004), provide rural households with a variety of products (Balulo, Muys, Nega, Tollens Nyssen, Deckers & Mathij, 2009; Nguyen, Do, Buhler, Harje & Grote, 2015), and environmental resource extraction is an important source of income in the rural areas (Angelsen, Larsen, Lund, Smith-Hall, Olsen & Wunder, 2012; Nguyen *et al.*, 2015). These resources include fuelwood, medicinal plants, water, bees, rivers, rangelands and wildlife, among others. The products harvested from nature are contributing greatly to the total household income. In Malawi, 30% of income is derived from forest resources, while in Ethiopia, 39% of the total income is accounted for by forest income (Balulo *et al.*, 2009), and in South Africa, non-farm activities contribute 60-80% of rural household incomes (Daniels, Partridge, Kekana & Musundwa, 2013).

The income derived from environmental resources, widely known as 'environmental income', supports rural livelihoods in four distinct ways:

- By supporting current consumption (Angelsen *et al.*, 2012).
- By meeting household's subsistence needs.
- By acting as a safety net in times of shortfalls (Balulo *et al.*, 2009).
- By helping households mitigate poverty (Angelsen *et al.*, 2012).

The management of these resources is governed by local knowledge as well as traditional knowledge, such as local rules, taboos and belief systems (Fabricius *et al.*, 2004). It is these sets of management techniques, passed from generation to generation, that help monitor resource consumption. Livelihood strategies, such as diversification, help households to access and use a variety of resources to sustain themselves. The household's opportunity to escape poverty is therefore highly dependent on the extent of its livelihood diversification. When it comes to livelihood diversification, gender cannot be ignored. Women are most heavily involved, and dependent upon small-scale, subsistence orientated wild resource collection, though some activities are just for men, due to cultural orientation. For example, in activities such as basket-making, mat-making, ceramics, weaving and others, women dominate, while men normally take up artisanal activities (Davis, 2003). Other diversification strategies includes remittances, which come from relatives, Government agencies and NGOs (Balulo *et al.*, 2009). In South Africa migration from rural to urban cities has led to increased remittances. It can be noted then that CBNRM initiatives have often pushed for more gender equality in use and management of resources, by providing a platform for support networks (Fabricius *et al.*, 2004).

## **2.7 CBNRM IMPLEMENTATION AND MANAGEMENT IN SOUTHERN AFRICA**

### **2.7.1 Implementation of CBNRM in Tanzania**

In Tanzania, the already existing policy that promotes community-based forest management (CBFM) was implemented through the Forest Act of 2002, whose aim was to empower communities to own and manage forests (Fabricius *et al.*, 2004). In this case,

the communities became both managers and owners of forests. Blomley, Pfliegner, Isango, Zahabu, Ahrends and Burgess (2008) assert that in the implementation of projects involving communities, the central government transferred key responsibility of forest management to villagers. This strategy was presumed to be the best method for managing natural forests for sustainable use and conservation, and promised better outcomes in conservation than the reliance on protection by central government that was practised in the past.

The partnerships between donor agencies and other organisations assisted in the launch of CBNRM activities (Alcorn, Kajuni & Winterbottom, 2002). One such programme was launched in the region of Tanga, which has diverse habitats including coral reefs, sea grass beds, coastal forests and mangrove forests. The communities' livelihoods depend on coastal resources. This was regarded as one of the most successful examples of CBNRM in East Africa.

The Tanga region in Tanzania is part of the western Indian Ocean coastline, stretches for about 150 km, and has about 90 villages which rely on fishing, processing and exporting their catch for livelihood (Makoloweka & Shurcliff, 1997; Wells, Samoilys, Makoloweka & Kalombo, 2010). Since the country has a decentralised government structure, where the central government works at village level, the villagers had committees, and elected officers who made and enforced by-laws. Therefore, the Tanga coastal zone CBNRM activities were carried out through the existing decentralised structure. The programme adopted a 4-step approach, which involved listening, piloting, demonstration and mainstreaming (Mokoloweka & Shurcliff, 1997), and these steps were meant to address the principal issues of over-fishing, destructive fishing, deforestation, coastal erosion, poor government enforcement, and improvement of village livelihoods (Alcorn *et al.*, 2002).

#### *Listening and piloting*

This phase ensured that the needs of the beneficiaries were identified and prioritised and correct issues were addressed (Verheij, Makoloweka & Kalombo 2004; Wells *et al.*, 2010). The focus was on institution and capacity building for integrated coastal management (Alcorn *et al.*, 2002). The process was done by listening to the concerns

and ideas in a small number of pilot villages, and testing potential ways of earning income sustainably. Skills training was provided to the regional and district officers, extension workers and villagers. Participatory approaches were used, and were key in understanding the nature of the environmental issues. The extension workers were based in villages, and led committees who dealt with environmental issues (Verheij *et al.*, 2004). In the piloting phase, the proposed actions were tested to see how they would work and generate alternatives. Pilot villages were selected, and on a small scale the implementation programme was run to determine the most effective way to carry out the project (Wells *et al.*, 2010). Alcorn *et al.* (2002) added that funding, training and technical assistance were provided. Listening and piloting resulted in enhanced awareness of socio-economic and natural resource issues of the communities.

#### *Demonstration and mainstreaming*

This phase was a continuation of the piloting stage, where the processes and actions of the previous stage were fine-tuned and widened in scope. The planned processes were adopted as a normal practice. The district council provided the advisory and supervisory role. The role of the villagers was participation in mapping and assessment; they collected data, and developed their own environmental action plan. Both men and women were represented. The programme took note of women's participation in all the phases of implementation, and in the management of coastal resource management. The monitoring of activities was jointly managed by the villagers, community representatives, local government and the navy, in arresting illegal fishing (Verheij *et al.*, 2004). This phase of demonstration addressed issues such as fisheries management and mangrove restoration, with collaborations within villages and ecosystem scale approaches. Also, it involved actions on development of cost-share arrangements, field-testing new practices, as well as monitoring and enforcement in designated management areas. Efforts were made to facilitate dialogue, consensus building and cooperation between villages in the development, and adoption of village by-laws (Alcorn *et al.*, 2002).

### **2.7.2 Implementation of CBNRM in Botswana**

The concept of CBNRM was officially embraced in 1989 in the country (Fabricius *et al.*, 2004). Government officials were the main drivers in the implementation of CBNRM and they facilitated the programmes in the local communities (Thakadu, 2005). The Department of Wildlife and National Parks aided in the implementation of CBNRM initiative in Botswana collaborating with other government ministries and Non-Governmental Organisations (Fabricius *et al.*, 2004; Thakadu, 2005). Control of natural resources by local communities has been achieved through decentralisation and by adopting and implementing several government policies such as the Wildlife Conservation Policy of 1986, the Tourism Policy of 1990, the National Conservation Strategy of 1990, the Tourism Act of 1992 and the Wildlife Conservation and National Parks Act of 1992 (Mbaiwa, 2005). The main funder of the project was USAID, and the CBNRM concept was adopted through the creation of small governments, decentralisation, and sustainable use of the resources.

Based on the proposition of the sustainable use principle and devolved resource management, the idea was thought to be a great success; however, it was later proven to be extremely problematic (Thakadu, 2005). The implementation of the CBNRM initiative in the Okavango Delta took place in three stages: policy development and planning, mobilisation, and facilitation and formation of management structures.

#### *Stage 1: Policy development and planning*

Thakadu (2005) posited that, in the Okavango Delta, implementation of CBNRM was facilitated through two policy documents: the Wildlife Conservation Policy and the Tourism Policy. These policy documents spelt out the involvement of citizens and their participation in tourism and wildlife. This gave the local communities the right to use and benefit from wildlife resources in their specific areas. The communities in or adjacent to areas earmarked for CBNRM initiatives were consulted, to ensure involvement of the communities and to get their input in the development and planning process.

#### *Stage 2: Mobilisation and facilitation*

The development and planning phase which was done at district level paved the way to the mobilisation and facilitation phase. The mobilisation teams included multi-sectorial and interdisciplinary facilitation teams and officers from the Department of Wildlife and National Parks (DWNP) (Mbaiwa, 2005; Thakadu, 2005). This was contrary to the bottom-up approach where the communities generate ideas and their goals, then inform the authorities. For the communities to feel ownership of the programme they should be allowed to generate their own ideas (Mbaiwa, 2005). The district personnel had a task to consult with local communities regarding CBNRM initiatives. Consultation with the communities was done through *kgotla* meetings (a traditional public meeting) where information on workshops and seminars was shared, and community representatives were elected, so as to build their capacity to handle CBNRM issues (Thakadu, 2005). The consultants and mobilising teams gave information to the communities about the CBNRM concept, its policies and operational legal framework. A fully-fledged outline for procedures that would be followed were rolled out, including the roles and responsibilities of the agencies that were to be involved, including the DWNP and various other government departments and the private sector (Mbaiwa, 2005; Thakadu, 2005).

### *Stage 3: Formation of management structures*

The communities had an obligation to set up committees, and the process had to be democratic, transparent, accountable, and representative of all community members. The villagers had options of using the already existing local structures, but were proved to be unqualified to handle CBNRM initiatives.

### **2.7.3 Implementation of CBNRM in Zimbabwe**

The Communal Areas Management Programme for Indigenous Resources (CAMPFIRE) was put in place to implement the reforms and decentralise rights over livelihoods to the local level (Nelson & Agrawal, 2008). This was enabled by the extension of ownership of wildlife and amendment of parks and wildlife Act by policy-makers, to allow residents to enjoy wildlife ownership on freehold properties (Madzudzo, HaBarad & Matose, 2006; Nelson & Agrawal, 2008). Further, CAMPFIRE was engineered by state wildlife agencies collaborating with local conservationists, rural extension experts and academics (Nelson

& Agrawal, 2008), with the aim to promote conservation of natural resources in areas held under communal tenure.

The CAMPFIRE programme was initiated in the 1980s by the Department of National Parks and Wildlife Management, and endorsed by the government of Zimbabwe (Child, 1996; Nelson, 2012). Child (1996) highlighted that CAMPFIRE was a homegrown programme largely based around sustainable resource use because the communal lands were severely degraded, due to population growth and overutilisation. The private sector had successfully managed to conserve wildlife, and the Department of National Parks and Wildlife Management imitated the CAMPFIRE pattern by setting up plans to conserve wildlife outside protected areas. CAMPFIRE started as a conservation tool, and explored a framework of an integrated land use plan for the communal lands bordering a number of national parks and safari areas in Northern Zimbabwe, which supported substantial numbers of wild animals such as elephant, buffalo, lion and leopard (Frost & Bond, 2008). To implement the programme, power was devolved from the state to the district council, but the involvement of the community in creating the reform agenda was minimal (Nelson & Agrawal, 2008).

#### **2.7.4 Implementation of CBNRM in South Africa**

The emergence of CBNRM in South Africa was a result of the promotion of sustainable use of natural resources and equitable sharing of benefits derived from natural resources (Tapela, 2007). Thus, both local and international policies, such as the Rio declaration on environment and development, Agenda 21, and the Convention on International Trade in Endangered Species, of which South Africa is a signatory, prompted the policy-makers to recognise the importance of both natural resources conservation and local participation in environmental management. At the national level, therefore, the Constitution of the Republic of South Africa 108 of 1996 provides the primary main charter within which CBNRM is built. One such programme was implemented at Makuleke community situated on the western boundary of KNP in the Limpopo province of South Africa (Carruthers, 1993; Tapela, 2007), and rich in wild plants, animals and beautiful landscapes (DEAT, [n.d.]; Tapela, 2007).

Robins and Waal (2008) stated that after the successful land claim, the community was required to establish a Communal Property Association (CPA) to ensure protection of wildlife in the area. At its implementation, the CBNRM initiative involved both the community-based and outsider institutional actors. The programme focused on capacity building, technology development and provision of community services such as infrastructure and commercial development. In addition, the GTZ transform programme has played an important role in supporting the CPA's executive committee to review and design new institutions for fair benefit sharing and good local governance.

The CPA holds the title to the land, and its executive committee is democratically elected every two years. The local-level management is administered by the traditional governance and transitional local council, composed of the tribal council, with the chief as the head, headman and elders as advisors. The tribal authority's duties were to manage community issues, indigenous laws and tribal levies (Robins & Waal, 2008). A development forum was created to represent the views and needs of ordinary people and to ensure that village development is promoted in a transparent and sustainable way. Field rangers were trained to do anti-poaching patrols, and collect data from the field about management issues. Moreover, a joint management board was set up to take decisions about anti-poaching, road and fence maintenance, wildlife management and other conservation issues. NGOs, donors and activists were actively involved in the early mobilisation around land claims and the post-settlement phase (DEAT, [n.d.]).

When setting up the joint management board between Makuleke CPA and SANParks, the community, however, felt that they were not equally represented. It transpired that they were treated as mere neighbours and not land owners (Robins & Waal, 2008). Leach, Mearns and Scoones (1999) also identified some challenges in the CBNRM programme at its initiation. Further, the implementation of CBNRM on the ground has been far less than what it was expected to achieve. Some of the problems identified include treating the intended beneficiaries as passive recipients of the project's activities, and overreliance on outside expertise.

Drawing from the discussions on the implementation and management of the CBNRM initiative, it can be noted that for the programme to achieve the intended outcomes, local

communities need to partner with different stakeholders, which includes the state, donors, international organisations and the private sector. Some programmes have been running for over two decades, including the Ben Lavin Nature Reserve which is run by the Manavhela community. Most CBNRM initiatives have, however, been marred by challenges of varying magnitude, and community involvement has been minimal. This is mainly attributed to insufficient devolution of power by the state. Ben Lavin Nature Reserve also had a tripartite style of operational management, consisting of the Ben Lavin Trust, WESSA and the Manavhela community. Using Ben Lavin as the case study, the researcher attempts to examine if current partnerships or management styles are ideal, whether communities need to manage natural resources without any partnerships, and what has kept them operating for over two decades.

#### **2.7.5 Implementation of CBNRM in other parts of Southern Africa**

Most countries in the region took lessons from the CAMPFIRE programme in Zimbabwe. It laid the groundwork for community conservation, with recommendations that the community is the appropriate authority for devolution of power concerning natural resource management (Nelson & Agrawal, 2008). In Zambia, conservation reform efforts on community participation began in the early 1980s, and the main actors were government officials, conservationists and foreign donors – such as the Norwegian government funders (Child, 1996). These institutions aimed at creating a means for the local people to benefit from wildlife in the land in which they lived. While the community conservation programmes in the country made a significant contribution to the revenue from wildlife use, obstacles emanating from poor social relationships between government actors and local communities were experienced.

Some significant contributions towards natural resource conservation through CBNRM programmes were noted in Namibia. The community-based initiatives that addressed environmental concerns in communal areas were initiated before the country's independence, despite political hostility under South African supremacy (Nelson & Agrawal 2008). However, some conservation efforts were necessary in the country,

because wildlife was on the brink of collapse as illegal hunting was intensifying. The political ambience was uncondusive to communities to take action to curb illegal hunting. Consequently, a shift towards community conservation was noticed in the 1980s, where communities started to establish game guards, and this resulted in change towards conservation. This was later enabled by the wildlife laws amendment in 1996, to provide for community conservation, which granted the communities legal rights over some game species (Nelson & Agrawal, 2008).

Child (1996) highlighted that local NGOs and international organisations such as the World Wildlife Fund also played a key role in the establishment of conservancies. They influenced the facilitation of implementation of wildlife policies, advocated devolution, and helped mediate conflicts over rights and benefits. Institutional elements of Namibia's wildlife use and management practices may also have contributed to enabling CBNRM reforms. At the implementation of the CBNRM in various parts of the country, some community members were elected to run the programmes. All the revenues collected in tourism ventures are retained by them, and they make decisions on who and how to invest it. Though by 2007 there were over forty well-established conservancies, the communities still had limited rights, as some rights were still held by the central government. The central government officials still determined the hunting quotas.

One notable example of where sustainable natural resource use was put in practice is the Torra conservancy. Situated in the north-western part of Namibia, the conservancy attributes its success to different actors who had some contributions on the implementation and management of the reserve, namely the Ministry of Environment and Tourism (MET), NGOs, Integrated Rural Development and Nature Conservation. (IRDNC), Save the Rhino Trust and pioneering private sector partners (Wilderness Safari Namibia and Savanna Safaris). Nkatha and Breen (2010) urge that CBNRM in the region of Southern Africa has been the understanding of an environmental governance system, and how the failures noted are due to inefficient environmental governance systems and inefficient devolution.

## **2.8 CHALLENGES IN IMPLEMENTATION AND MANAGEMENT OF CBNRM**

In the preceding discussions, it has been stated that the CBNRM approach is built on the presumption that communities will derive an incentive from conserving the natural resources (Boonzaaier, 2012), and support from all departments and spheres is necessary for the success of CBNRM (Nhatumbo, Norfolk & Pereira, 2003; Medvey, 2010). Nhatumbo *et al.* (2003) identified the four pillars of CBNRM as capacity building, community organisation, income generation and empowerment. This separates the CBNRM from the ancient conservation that did not include income generation. On the implementation and management of CBNRM in various parts of the world, literature shows that the programmes did not perform as expected.

In research carried out by Songorwa (1999) in Tanzania, evidence confirms that the communities were generally not interested, or had temporary interest, in conserving wildlife on their land. Yet, the success of the CBNRM programme depends on the active co-operation of the entire community. Lack of capital, including scarcity of entrepreneurship and managerial skills in the tourism business was a major challenge in the day-to-day management of projects.

Other CBNRM initiatives were greatly impacted by political interference from both international and national space, where these initiatives were negotiated, such as Malawi's neo-patrimonial state (Blaikie, 2006). Löwegren (2013) highlights that the failure of CBNRM is partly because of reluctance by the government to devolve sufficient powers to the community. The power that is transferred is often to unaccountable local bodies, and this threatens local equity and the operating environment. As a result, many view CBNRM as a tool used by the government to push their environmental management responsibilities and meet their conservation interests by using communities, rather than meeting local livelihood needs.

### **2.8.1 Insufficient devolution of power**

Central to the success of the CBNRM programme is the concept of devolution of power and control of natural resources by the communities. The determining element of CBNRM

success will therefore largely be how much authority and responsibility the communities are given to manage their own resources. This sentiment is based on the belief by several scholars (Campbell & Shackleton, 2001; Shackleton *et al.*, 2002; Nkatha & Breen, 2010), that devolvement of power increases the chances of good incentives that will entice the communities to conserve resources, and thus curb the elimination of wildlife. Campbell and Shackleton (2001) documented several examples where insufficient devolution was a hindrance to CBNRM projects success.

In Zimbabwe, their study on CAMPFIRE projects showed that natural resource management power was not given to the communities, and instead was given to the rural district councils. The control of natural resources was therefore decentralised to districts and not communities. This setup does not allow the locals decision-making powers, and the state has all the authority.

In Malawi, legislation on forest management gives communities access and use of woodlands, it promotes community participation, and it also encourages working together by the forest department and other organisational departments. However, it does not give statutory authority to village-level organisations.

Shackleton *et al.* (2002) uncovered that though Botswana and Namibia seemed to have more liberal policies for power devolution than most communities, evidence shows that the state continued to exert its power and control over natural resources. In the same vein, Alcorn *et al.* (2002) add that in Tanzania the community was given petty responsibilities such as patrolling forests and apprehending poachers, yet the state retained power such as approving by-laws, forest management plans, and determining when the villagers could harvest timber and wildlife. Perhaps government control remains crucial so that the situation would not degenerate into 'the tragedy of commons' once government relinquishes control completely.

Botswana and Namibia have more progressive policies for power devolution than most countries in Southern Africa (Shackleton *et al.*, 2002), but in some cases evidence shows that the state continues to exert power and control over resources. Several examples have been highlighted by Shackleton *et al.* (2002) on the weakness of devolution of power

in CBNRM programmes. In one case, the department of local government in Zimbabwe issued a directive that funds earned by CBNRM projects be transferred to the district council. This posed a serious threat to the community incentives and the sustainability of the entire project. In Namibia, the setting up of wildlife quotas was done by the government and the Ministry of Environment and Tourism, instead of this being done by conservation groups. In China, devolution was put at risk by the policies that protected the Yangtze watershed, stopping farmers from harvesting and making an income from the trees they presumably owned.

Devolution efforts do not materialise in practice because of at least two reasons: Firstly, there are poor social relationships between government actors and local communities that make it hard for devolution to take place; and secondly, some governments fail to effectively transfer decision-making and benefits to locals, and as a result, devolution does not take place (Nkatha & Breen, 2010). Collectively, these studies show that the perceived dismal performance of CBNRM can be attributed to insufficient devolution of power.

### **2.8.2 Community institutional deficiencies**

Community conservation relies heavily on active community involvement. This is not only limited to active wildlife use, but also in the pre-planning, planning, implementation, monitoring and evaluation of the programmes (Songorwa, 1999). Thus, for CBNRM activities to be meaningful, the programmes should involve the communities in all wildlife decisions. The ideal approach is the bottom-up approach. If this approach is not applied, some paucities are found, and true community participation does not materialise. Among other variables, a lack of community involvement (Songorwa, 1999), lack of sense of ownership (Sebele, 2010), unrealised expectations (Musumali, Larsen & Kaltenborn, 2007), lack of incentives (Boonzaaier, 2012) and misunderstanding of community setup (Kumar, 2005) were a challenge within the community itself that hindered optimum performance of CBNRM programmes. Additionally, lack of will to participate by communities and power struggles among themselves had led to failure of CBNRM projects (Musavengane, 2019).

### **2.8.3 Lack of sense of ownership and involvement**

Communities are at the core of a community conservation programme, and as such are fundamental implementers of CBNRM. Failure to involve local people in the planning and implementation has led to unsuccessful CBNRM (Songorwa, 2009). The majority of the community members must benefit from the revenues in a free and clear manner; if this is not achieved, resentment of the whole programme starts. Sebele (2010) adds that in most CBNRM initiatives, communities are not involved in the running of the projects. For instance, in Botswana, although consultation through *kgotla* meetings was held with the community, it was noted that the decisions to run the project did not represent the wishes of the community. Interviews with board members indicated that the board did not fully involve the community. There was miscommunication through the medium used, which were newsletters printed in English for illiterate villagers, and insufficient information about CBNRM enterprises. For the programme to run successfully, access to information and participation is of the utmost importance.

Studies such as those conducted by Musumali *et al.* (2007), Songorwa (1999) and Sebele (2010) show that CBNRM failed to involve the communities in their projects. This led to the lack of a sense of ownership of the programmes by the community. Musumali *et al.* (2007) states that the communities lacked understanding of their roles and responsibilities. Additionally, there was a lack of understanding on who actually owned the project. Some villagers thought the community owned the projects, while others thought the government owned them. In Tanzania, the villagers were skeptical of joining the programme – they thought it was a trap by the government to identify those still involved in illegal poaching (Songorwa, 1999). In another instance, the director of wildlife, seeing low interest in the programmes, enticed the communities by promising them pumped water, improved health, and education. In addition, they were promised meat, employment and help to start small self-help projects. None of these promises materialised.

In Botswana, it was not clear who owns the Khama Rhino Sanctuary Trust (KRST) – whether it was the royal Khama family, or a parastatal, or a community project (Sebele, 2010). Moreover, in other communities, influential families often dominated CBNRM efforts, and monopolised the benefits. In essence, when the communities feel they have lost their livelihoods, dislike of the project sets in. Although in the policies and documents of such initiatives communities are said to own the projects, participation is minimal. It can then be argued that the project is not theirs, as they are not involved in the day-to-day planning and decision-making.

#### **2.8.4 Unrealised expectations and lack of incentives**

In a study carried out by Songorwa (1999), which is particular to Selous conservation program CBNRM project, it is established that the unfulfilled promises amounted to unrealised expectations and a lack of interest by communities in Tanzania. This affected community members' attendance at meetings, and some meetings even failed to convene because of their failure to arrive. Again, the community lacked clear understanding of the programme goals and objectives, and had a perception that the outsiders valued wildlife more than them

Further, examples documented by Songorwa (1999) included an incident where communities accepted the programme because of the promised socio-economic benefits. Regrettably, the programme failed to meet the anticipated expectations, and the wildlife problems in the community persisted. In a period of over seven years the programme failed to convince the community that wildlife conservation was beneficial to them. Due to these shortcomings of the programme, even the villagers who had tried to support it re-evaluated their decisions. The other opposition came from farmers who kept livestock. They perceived wildlife as predators. Some local leaders accepted the programme, thinking they were going to personally benefit from it. Some of the key people in the community institution were involved in poaching – the very problem they were meant to curb.

Musumali *et al.* (2007) observed that unfulfilled expectations and frustrations by the communities in terms of unrealised benefits, is one great challenge in running nature conservation projects. The perceived paybacks resulting from conservation of natural resources boost local communities and the nation, thereby achieving sustainable socio-economic and environmental development (Lee, 2013). Mbaiwa (2005) posits that poor financial and employment incentives are one critical issue that affected the CBNRM in the Okavango Delta. Households did not reap any benefits, or received too little from the initiative. In another case it was not even clear to the communities whether the benefits were supposed to be earned at household or community level.

Boonzaaier (2012) established that the communities are not interested in the conservation of resources of wildlife, but want the benefits that accrue from reserves. The single most important reason for their discontent is that they are not benefiting from reserves; therefore, to improve local attitudes, revenue sharing may play a very important role. It also has to be noted that individuals' interest in conservation and discontent are dependent on variables such as age, gender, occupation and economic standing. Women and traditional healers are likely to have negative attitudes if the initiative hinders them from benefiting from firewood and plants for medicine, while young people will see prospects of employment through tourism.

### **2.8.5 Lack of understanding of the community**

CBNRM institutions such as the state, defined community as indigenous people in a particular place, yet, in practice, defining a community is far from simple. Kumar (2005) argued that due to the generalisation of the term 'community' by scholars and advocacy work, it has somehow misled CBNRM into treating a community as a homogeneous group. It then failed to take into account the ethnicity and differences in small tribal groups. The ideology by some CBNRM implementing institutions was that if some communities seem not to exist, they will make them into one and order them to participate. An example of West Cameroon shows that the issue of culture and language difference among villagers proved the ideology of a homogenous community very challenging.

Another example of the assumption of a homogenous community is evident in the Nepal Community Forest Programme. The programme failed to take into account, and excluded, low-income people, landless migrants and other ethnic groups. One group that was seriously affected was the blacksmiths who traded their products for rice when the charcoal production they depended on was legislated as illegal, so their activities were criminalised (Kumar, 2005). Thakadu (2005) added that in Botswana, in some communities, many villages were brought together, yet they had different histories, ethnicities and livelihood strategies. This multi-village setup proved to be a hindrance in the implementation and smooth running of the projects.

In areas where different ethnic groups co-exist, implementation of CBNRM becomes problematic. Those institutions who assume that a community has shared norms fail to recognise the complications this situation poses for implementation. Again, one crucial aspect that is often unheeded is recognition of the fact that natural resources themselves are also quite heterogeneous. For instance, the management of a watershed by upstream users might be different from that of the users downstream.

#### **2.8.6 Weak participation by local, national and provincial government**

It is mentioned in literature that weak participation by the state and its departments have presented some challenges in CBNRM. Some failures include improper coordination, CBNRM initiatives not being priorities in some municipalities, lack of specialised staff and lack of gender representation.

Fabricius and Collins (2007) stated that natural resource management is improperly placed in some municipalities; for example, it can be found under Health, yet it logically belongs under Local Economic Development, or planning directorates. It is not viewed by municipalities as a top priority. Further, reluctance by provincial and national governance to prioritise CBNRM in Okavango led to its failure. Additionally, management of the projects required specialised staff with an interest in social sciences, but such human capital was scarce.

The advocates of rural community organisations are mainly elderly, retired males who often are illiterate and lack formal education. Young people seem not to be interested in attending meetings, and when present, are reluctant to participate due to the traditional respectfulness of the young towards elders. Again, political influences, gender and age hierarchies made the educated and literate to be sidelined (Fabricius & Collins, 2007). In Makuleke, strong local organisations do exist, such as ward committees, co-management committees and communal property associations, but they have many priorities besides CBNRM. The same individuals also tend to be active in many different organisations, stretching their capacities to the limit. Traditional leaders also have a vital institutional role in natural resource management, but also play other different roles in the community that threaten their legitimacy. Strong cooperative governance structures could have strengthened local and government organisations, and prevented these shortcomings. Boonzaaier (2012) echoes that proper coordination does not occur between the different levels of the authority structures. This leads to failure in some CBNRM initiatives.

### **2.8.7 Governance and political interference**

Good governance is characterised by participation, accountability, transparency, efficiency, and adherence to the rule of law (Lund & Treue 2008). For the CBNRM to work through its institutions, which are government departments, community, donors and NGOs, it needs governance structures that will enable the implementation and management of the programmes (Thondhlana, Shackleton & Blignaut, 2015). It is these institutions then that mediate access to, and control over, natural resources, by determining whether or not one is eligible for making decisions, the actions permitted or forbidden, procedures for actions, and the type of information one can get in a specific context. Thakadu (2005) established that there was a strong lack of political support in Botswana. Instrumental policies, such as the tourism policy and wildlife conservation policy, took a long time to be drafted. This deprived the CBNRM of proper policy guidance.

Thakadu (2005) affirmed that, without policy, CBNRM lacks commitment. In the case of Botswana, the CBNRM programme has not moved beyond being wildlife based, due to the fact that the two policies that facilitated the programme lacked commitment, and there

was no supporting official policy. The perceptions that people have is that CBNRM is an initiative of the DWNP, and in turn, they left the bulk of the mobilisation responsibility to the Department. The lack of commitment was also exacerbated by the fact that the initiative was conceived through the DWNP, and was therefore perceived as their own personal project, in which communities had no stake. Lack of policy support and clear guidelines deters the other government implementing agencies from giving full commitment and compliance. The void in the policy, and a mix of other related magnitudes, all point to the unpreparedness of the government to venture into CBNRM. Moreover, the plans appeared to be planner-centred, and attention was not given to tribal affiliations. Such undertakings led to dissatisfaction. Even local institutions traditionally do not encourage women, marginalised groups and youths to participate.

Cocks *et al.* (2001) state that lack of statutory power hinders the community from enforcing decisions concerning resource management, due to administrative constraints, including institutional weaknesses and poor co-ordination of the various spheres of government. Again, there seems to be very little support from the local government structures regarding the communities' attempt to manage their resources. Current government policies offer very little support concerning CBNRM. Fabricius and Collins (2007) posit that an important part of Makuleke governance has been a co-management arrangement with the conservation agency.

Good governance has also taken place at community level, where they have tried to develop transparent and accountable institutions to facilitate benefit sharing. Most obstacles in the implementation stage of the initiatives are related to governance failure, particularly the failure of cooperative learning networks between scientists, government and local communities. Lack of human capital also led to the slow pace of development, that was not anticipated by the managers and implementers. Capacity development and day-to-day mentorship was essential for the progress of the project, yet it was underestimated and under-budgeted. Other delays included miscommunication, non-attendance at meetings by key stakeholders, and lack of office equipment. All the

challenges could have been projected and budgeted for, and solutions solicited if there were strong governance structures.

Lack of political will and political interference in CBNRM presented an obstacle that affected the implementation and management of the projects (Blaikie, 2006). In Malawi, the appropriation and control of natural resources was under Dr. Hastings Banda's government. Protection of trees and forests was removed from village forest areas (VFA) and handed to district councils which were controlled by party members, thereby undermining VFA power. Campbell and Shackleton (2001) stated that, in Lesotho, conflicting legislation undermined the effectiveness of CBNRM. This is evident in their institutional framework for wildlife management, which does not allow communities to derive much control and decision-making power from these rights, and all authority still ultimately lies with the state. Presently, CBNRM advocates that local communities be enabled to reclaim and control natural resources, then, starting from the local community, through chiefs, to district officials and upwards to the state, plans and decisions should be executed. This idea does not, however, look attractive to those in the top level network.

### **2.8.8 Lack of capital**

There is a high rate of failure in CBNRM initiatives, predominantly in their early stages of development, which could be partly attributed to shortage of capital in rural areas (Fabricius & Collins, 2007). The five types of capital discussed in this study are natural capital, social capital, human capital, physical capital and financial capital.

#### *Natural capital*

The rural livelihoods are dependent on natural resources, and the CBNRM strives to capacitate communities to derive optimum benefit from them. Angelsen *et al.* (2012) state that products from the forests and other natural uncultivated environments are used by households to meet their subsistence needs, and generate income. These include construction material, medicine, fruit, vegetables and firewood, among others. Lowore (2006) highlighted that woodlands help relieve the household's limited budgets by

supporting rural livelihoods with domestic material goods and services, such as basic goods for shelter, food and nutrition, found in insects, honey and fruit. Furthermore, while some of it is consumed at home, the rest is sold in the urban market.

### *Human and social capital*

CBNRM institutions need to ensure that human capital is developed in order to enhance livelihood security. This encompasses skills, knowledge, ability to labour and good health. Thakadu (2005) highlights that community mobilisation activities of CBNRM have been compromised due to lack of sufficient human resources capital. Unavailability of dedicated personnel to mobilise CBNRM initiatives denies communities the full complement of advice to facilitate a comprehensive resource management programme. In some cases, some officers who were brought in into the programme were unaware of their roles and responsibilities, and misrepresented their departments. Lack of necessary skills such as business management and entrepreneurial skills led to communities in the Okavango conservancy forming partnerships with safari companies. The collaboration helped fill the gap in their lack of knowledge in running commercial natural resource related businesses (Mbaiwa, 2005). However, evidence on the running of the venture showed that, instead, communities were not involved in the management and running of the tourism business, but became mere labourers. Further, the lack of entrepreneurial skills led to failure to re-invest, and the funds were kept in the bank, making them prone to misuse. This defeats the whole purpose of CBNRM, which is to provide the communities with an incentive to manage the land or natural resources.

CBNRM in the Okavango performed poorly, due to lack of empowerment, especially entrepreneurship skills in the tourism business, in local communities. Blaikie (2006) stated that management skills to run safari enterprises are not normally found in the local VDC. It is usually outsiders then who successfully bid for them; they pay licence fees to VDC, and make little attempt to hire locals and develop their skills. The locals only get involved in lower-level jobs like construction, catering and driving. The local community is therefore not given the chance to widen their livelihood options and other associated skills. Thus,

distrust and frustration become the nature of the relationship between private sector safari companies and communities.

#### *Physical capital and financial capital*

Basic infrastructure and production equipment enable people to pursue their livelihoods. Their importance in the successful implementation of CBNRM can thus not be neglected. CBNRM must again support local access to, and use of, financial capital. These are economic assets that are essential for the pursuit of different livelihood activities, such as old-age pensions and child support grants.

#### **2.8.9 Conflicts**

Use of resources from the same natural system or geographic location by several interest groups, leads to conflict (Mbaiwa, 2005). The Khwai residents and the DWNP in Botswana were in conflict over resources. While the villagers felt that the land was theirs and they could hunt and gather veld products without restrictions, the Department's position was that the wildlife habitat and wildlife needed protection from the hunting community. The different views led to conflict between the two parties. Anthony (2007) concurred by adding that communities whose livelihoods chiefly involve the direct exploitation of local natural resources often come into conflict with the institutions of protected areas, which are primarily designated for natural resource conservation. However, greater participatory planning is believed to enhance local support for biodiversity conservation in protected areas.

The Moremi Game Reserve, which became one of the tourism hubs of Botswana, had challenges between the community and state agencies. Access to the game reserve was denied, and reserved for tourism purposes. This meant that when visiting the reserve, certain fees were required at entry. The villagers viewed the place as theirs, and therefore saw no need to pay. This resulted in a lack of co-operation in the management of wildlife, between the two parties. This is against the principles of community conservation, which advocates for the participation of stakeholders, particularly the local people, in the decision-making and resource use.

Another obstacle was the mindset of the Botswana central government, which held the view that wildlife and rural people cannot co-exist and use the same area. Managers of the reserve perceived the domesticated animals such as donkeys and dogs as a menace, their littering distorted the pristine wilderness picture that clients pay to see. Further, villagers received insignificant economic benefits from the game reserve, with only a few people employed at the lodge as groundsmen.

Fabricius and Collins (2007) highlighted that one of the main causes of conflict was the distribution of benefits. In most cases, as soon as the project funds were announced, the intended beneficiaries became embroiled in disagreements. The members would normally argue about who among them would be trained, how to distribute fees, and who should benefit from employment. Because financial capital is in such short supply in rural communities, rural governance structures have not yet designed mechanisms for dealing with financial greed. These conflicts bring discord in the running of CBNRM projects.

## **2.9 COMMUNITY ATTITUDES TOWARDS PROTECTED AREAS**

The relationship between the community and protected areas is such that it can either be positive, if benefits are realised, or negative, if costs accrue to the community. Benefits and costs derived from wildlife in protected areas determine the relationship between the local community and protected areas. Benefits result in positive attitudes, while costs from predators result in negative attitudes (Anthony, 2006; Mutanga *et al.*, 2015). Further, if the relationships are not positive, the protected areas suffer loss through unsustainable behaviour on the part of the local community, in activities such as illegal hunting, harbouring external poachers, habitat encroachment and mining. The attitudes of neighbouring communities towards protected areas are increasingly being considered in the establishment and management of national parks. In South Africa, more inclusive policies have been introduced which seek to involve neighbouring communities in policy formulation and arrangement of the KNP (Anthony, 2007).

Anthony (2006) argues that the KNP biodiversity conservation and socio-economic development are largely dependent on local community perceptions and others responsible for these resources' use. Scholars and conservationists unearthed that, in developing countries, communities depict negative feelings towards protected areas, emanating from failure to conserve biodiversity (Mbaiwa & Stronza, 2011). Therefore, in order to lessen such attitudes, conservation should be linked to rural economic development, meaning that local communities need to be involved in the decision-making process of natural resource use, and receive economic benefits from the conservation. Tourism can generate substantial revenues for communities, and thus enhance positive attitudes towards conservation. On the contrary, where there are no economic benefits, attitudes remain negative. Further, loss of crops due to damage by wildlife, enhance negative attitudes.

If local residents are involved and made aware of the importance of biodiversity, they tend to conserve wildlife (Mbaiwa & Stronza, 2011). The villages in the Okavango Delta in Botswana were captured as proclaiming that thatching grass harvesting should be controlled. They made a resolution that hunting be done during hunting seasons and only with hunting permits. Moreover, pregnant animals should not be hunted, because they were aware of the effects on these species. This shows that the communities which have a good understanding of biodiversity conservation, display a positive attitude towards conservation. Mutanga *et al.* (2015) concur with Mbaiwa and Stronza (2011) by stating that benefits and costs derived from wildlife in protected areas determine the relationship between the local community and protected areas. Benefits result in positive attitudes, while costs from predators result in negative attitudes.

There are notable examples in Botswana and South Africa, where CBNRM initiatives have benefited the community, and in turn, the community has conserved the environment (Anthony, 2006; Mbaiwa & Stronza, 2011; SANParks, 2012). The Okavango Delta has created employment opportunities for locals, and has provided financial support such as assistance with funerals, support for local sports, scholarships, transport services, building of water stand pipes, construction of houses for the elderly and needy,

assistance to orphans and the physically challenged, and provision of communication tools such as television and radios.

SANParks (2012) highlighted some cases of community benefits. The Ritchtersveld community is enjoying the grazing pasture for goats and sheep in the Ritchtersveld National Park. The Makuleke community has benefited from employment opportunities and various other projects such as upgrading of local schools and electrification of communal properties. The Kgalagadi transfrontier community also benefited from employment. Communities in other parks also get to sell their arts and crafts products to tourists.

The local communities near the KNP, however, perceive the park as harbouring dangerous animals causing damage and threatening their livelihoods. It is perceived as a threat and not empowering them but contributing to current injustices. It inhibits the pursuit of economic diversification, leaving communities with a sense of hopelessness. Addressing these conflicts will improve local perceptions of the park, and build trust and cooperation among community and wildlife parks. Again, education is a vital tool that is viewed as having the potential to shape attitudes towards conservation.

### *Positive attitudes*

There is a substantial amount of benefits that accrue to communities and can link economic development and conservation. The argument is therefore that benefits influence positive attitudes of communities towards conservation (Mbaiwa & Stronza, 2011). Conversely, where local people do not derive economic benefits from natural resources, attitudes towards conservation remain negative. Costs that are linked to conservation, such as crop damage by wildlife, result in negative effects. In Uganda, in the Bigoli village, the local community has developed a positive attitude towards tourism, because they believe it creates economic benefits for them. Decentralisation of natural resources is believed to be the solution to wildlife decline, compared to the central government's failure to conserve resources.

The concept of CBNRM is thus that the local people are interested in natural resource conservation and sustainable use of natural resources around them, rather than centralised government institutions. The assumption is that once the communities participate in using the resources, they will derive economic benefits, motivate themselves, cultivate their spirit of ownership, and enhance their positive attitudes and use of the resources sustainably (Mbaiwa & Stronza, 2011). In these authors' study, in the Okavango Delta the findings showed that people were happy to see tourists visiting the reserve, because tourists brought revenue to their village. Their visit facilitated the creation of roads, and it brought income by buying their craft products. This improved their livelihoods. However, a smaller portion of villagers felt that they did not receive a fair share of the benefits such as employment opportunities, and these negative attitudes can hinder the progress of a CBNRM project. Some positive sentiments uttered by the residents were the following:

- *“do not hunt giraffe and sable until they multiply”*
- *“the giraffe is harmless so why hunt it”, “sable is scarce, live it to multiply first for some time”*
- *“we should hunt during the hunting season from 1 April to 30 October with a hunting permit”*
- *“We should never hunt pregnant animals”, and “we should only kill old males”*

This evidence shows that residents are aware that sable and giraffe populations are threatened, and hence support the idea of suspending the hunting of such species. Households are also aware of the scarcity of thatching grass, and thus encourage the idea of having rules in place to control the harvesting of this grass species, in order to achieve conservation. Moreover, the management role that communities played in natural resource use influenced the development of positive attitudes towards conservation of sable antelope, giraffe and thatching grass. This shows that when people take part in the decision-making process of natural resources around them, they often feel obliged to conserve them.

There are various factors observed by Anthony (2007) in the KNP, where positive attitudes towards conservation were noted. Employing a family member enhanced the whole household's attitude. Respondents' age also influenced attitudes: the study shows that younger respondents held a more favourable attitude, but older respondents who had personally experienced injustice, had a more negative attitude. Further, by ploughing back to the community through attempts made, such as assistance in educating neighbouring school children through in-park educational tours, gave the park officials a chance to highlight the positive role that KNP plays in conserving biodiversity for future generations. Outreach programmes incorporating environmental education can influence attitudes towards protected areas. Again, environmental education components of community outreach programmes can also have important indirect benefits, including opportunities for dialogue and improving understanding. Also, in the KNP, good relations among the staff enhanced the positive attitude in the community (Anthony, 2007).

According to Mutanga *et al.* (2015), communities living closer to protected areas enjoy benefits and incur costs, which then determine their attitudes towards the reserves. If their needs are met, they are likely to appreciate the protected areas. As such, communities that receive more wildlife-related benefits are more likely to support conservation, while those that receive less benefits express dissatisfaction.

### *Negative attitudes*

It is believed that negative attitudes towards conservation are a direct result of failure to conserve biodiversity. However, involvement of local communities in the decision-making process of natural resource use and provision of economic benefits, can reverse such attitudes (Mbaiwa & Stronza, 2011). The situations that give rise to resentment of nature reserve parks include failure by park management to mend broken fences, thus allowing animals to escape and destroy community crops. Additionally, farmers are not compensated for the damage to their crops, and their domestic animals are eaten by predators. In another case, an elderly woman had to run for her life from elephants.

In Uganda, the general feeling towards elephant conservation was positive, but became more negative when elephants destroyed the communities' gardens. In the KNP, negative

responses towards conservation were noted, and they stemmed from lack of education for neighbouring villages by KNP management. There was mistrust between the parties involved, and the villagers accused KNP reserve staff of arresting people for illegal resource exploitation outside the park. Yet, KNP staff had no jurisdiction outside the park, except in cases where they were working in cooperation with the South African Police Service to search residences suspected of harbouring elephant tusks or rhino horn.

Meanwhile, other community members were neutral, because they were not seeing any relevance of the park in their lives, they had never talked to the KNP staff, nor seen any benefits, regardless of the awareness efforts conducted to improve their knowledge on the project. Further, a low level of participation was highlighted as the main obstacle. Overall, people's attitudes and perceptions are changing to be favourable towards conservation – thus, CBNRM has a good impact on promoting sustainable natural resource use.

## **2.10 CONCLUSION**

Reduction in Africa's biodiversity necessitated natural resource conservation. The initial conservation ideology was animal preservation that excluded humans. Communities were dispossessed of their land, in order to pave the way for wildlife parks, and this led to disharmony between conservation agencies and locals. The realisation of the shortfalls of fortress conservation ushered in a more people-centred approach: community conservation. Through policies such as Agenda 21 and Sustainable Development, the concept of CBNRM emerged in some parts of the region. The CBNRM principle entails conservation of natural resources by communities who, in turn, derive an incentive from conserving such resources. The initiative was pioneered in Zimbabwe by means of the CAMPFIRE project in the 1980s, followed by further programmes in various parts of the region, and Asia. The CBNRM programmes have been implemented and managed with varying levels of success and failure. Relationships between the communities and wildlife parks are either positive or negative; that is, if communities are benefiting from resource

use, they tend to display a positive attitude, and a negative attitude if they incur costs and losses.

Although the reviewed literature indicates failure of some of the CBNRM programmes, none of the literature, at least as far as could be identified, provides how these failures are overcome, in order to successfully manage resources under the model. One of the objectives of this study is to assess the challenges of the CBNRM versus the managing processes in place that either overcome these challenges or assist in making sure that the CBNRM remains a going concern.

The challenges that are experienced in managing natural resources through the CBNRM model become the basis on which the study is framed under the common property management theory. That is, the study is approached from the understanding CBNRM is not void of challenges. However, this should not mean it cannot be used. Resultantly, managing challenges experienced in taking care of natural resources through the CBNRM approach, may extend the current knowledge on natural resources management.

## **CHAPTER 3**

### **RESEARCH DESIGN AND METHODOLOGY**

#### **3.0 INTRODUCTION**

This chapter describes the research design, research methods, the ways in which the data was collected, and the data analysis. The theory on CBNRM discussed in the previous chapter played a critical role in the selection of the best research method to achieve the objectives. The research design pertains to the project's entire plan, and the methodology outlines the data collection methods. The data sources were interviews and documentation such as minutes from the nature reserve management.

#### **3.1 RESEARCH DESIGN**

A research design is a grand plan of the entire research project, and clearly outlines how one wishes to proceed with the research. It incorporates techniques on how to guard against both internal and external factors which may interfere with the proceedings of the research (Nsingo, 2006). The design therefore puts together various components of a particular piece of research. This study followed a descriptive design and a qualitative approach. A descriptive design enabled the researcher to find out how the Manavhela community uses their natural resources and in turn conserves them. The qualitative approach was the most appropriate in gathering data on the community's life experiences (Mouton, 2001), especially in unearthing the minute but crucial details. The case study method was thus selected for this study. Case studies are usually qualitative in nature, and aim to provide an in-depth description of a small number of cases. Additionally, Yin (1999) stated that case studies are suited to studies with a focus on some real contemporary life context, and a preferred strategy when 'how' and 'why' questions are being posed.

## **Case study selection**

This study made the selection of Manavhela Nature Reserve, with a three-phased approach: (1) implementation and management of CBNRM in Manavhela; (2) challenges and/or successes in the management of the CBNRM programme; and (3) community attitudes towards natural resource conservation. The three-phased approach was followed because it has the potential to enhance understanding on how communities can better manage their natural resources, and in turn improve their livelihoods. The available studies have not fully exhausted scientific assessments of CBNRM practices, patterns, attitudes, strengths, weaknesses, opportunities and challenges, where implementation has taken place.

A case on the implementation of the CBNRM in Manavhela community was therefore chosen because it is crucial to learn how the programme was executed. The management of the natural resources and its challenges and/or successes is worthy of an investigation, and the pursuit of understanding the management issues in the natural resources cog, necessitated the inclusion of the Manavhela Nature Reserve case in the study. Understanding community attitudes towards natural resources is prominent in the study, because it offers an opportunity to understand how livelihoods and conservation are handled by the community. Consequently, the guiding aspect in the selection of cases was the need to highlight conservation of natural resources by communities who in turn benefit from improved livelihoods, due to this process. Furthermore, improved livelihoods are critical in the sustainable use of common-pool resources.

## **3.2 METHODOLOGY**

The study sought to enrich the understanding of community natural resource management in Manavhela. As such, the methodology in this study was implemented in a way that addresses the following research questions:

- How was the implementation of CBNRM done in Manavhela?
- What sort of management practices are in place?
- What are the challenges and success factors faced by CBNRM in Manavhela?

- How are these challenges overcome by the nature of implementation that established the CBNRM in Manavhela?
- What sort of management practices are used to overcome and cope with challenges to ensure that the CBNRM remains a going concern?
- How has the CBNRM influenced the community attitudes towards natural resources?

To answer these research questions, relevant methodological requirements were considered and implemented. The methods of collecting data included interviews with the key informants: with the management and workers of the nature reserve. Information on the implementation of CBNRM and the challenges in the management of the programme were collected from both the management and workers. The workers at the reserve were key in providing information on ecotourism products and poaching activities at the reserve. The key informant interviews were unstructured, and this allowed the respondents to talk freely with minimum guidance. The unstructured interview guide contained unguided sections with open-ended type questions (Walliman, 2011). Only willing participants became part of the respondents for the study. The information received from the staff of the nature reserve was triangulated with the data received from key informant interviews with the community representatives, nature reserve management, as well as with the documentation search.

A documentation search was used, and was crucial in providing the relevant history relating to the implementation of the CBNRM programme, as well as some other issues that did not emerge through key informant interviews. The documentation search used records from the management office to gather information on how the households relate to their environment. Also, the documentation search was used to reveal how the respondents carry out their daily duties vis-à-vis sustainability.

### **3.2.1 Target population and sampling**

The research participants were selected by using the convenient sampling technique. In this type of non-random sampling, participants are selected based on easy accessibility,

availability at the constrained time of research and/or willingness to participate (Daniel, 2011; Bell, Bryman, and Harley, 2018; Mauldin, 2020). Participants who were conveniently located were chosen for the study. To determine the number of interviews, the subjective saturation point was used, where the cut-off point was reached when an additional interviewee provided no new detail to the information already received from other interviewees. The participants targeted to be respondents were fairly homogenous as they are workers, supervisors and community representatives.

### **3.2.2 Data collection plan**

The data collection plan indicates how the process of collecting information was organised. This process was designed taking into cognisance the fact that the study used two different data collection methods: interviews with reserve management, workers and community representatives, and the documentation search. Interview guides were developed and piloted on one manager, one worker and one community representative. Adjustments were then made to the guides to cater for lessons learnt during the pilot, and thereafter they were treated as final (see Appendix 2). The detailed issues of conducted interviews are given below.

#### **i. The community**

The community of Manavhela was chosen as a focus of this study, because the people of Manavhela are the main actors in the management of the CBNRM projects. The management arrangement is that the community needs to be involved in planning, to ensure their maximum support in resource conservation. Fabricius *et al.* (2004) highlight that the community has indigenous knowledge about their local resources, and thus places them as key informants in the study. Two key interviews were used to collect data from community representatives. The pseudo names of the respondents are Com. Rep A and Com. Rep B.

#### **ii. Reserve workers**

The day-to-day running of the reserve is done by people in the managerial posts, as well as cleaners, rangers, drivers, security, and all those whose daily responsibility is to work

at the reserve. These were relevant in the case, as they have first-hand information on the operations of the reserve. Unstructured interviews were conducted at their place of work. One person from each class of workers was interviewed, to give six respondents. Their pseudonyms as used in the findings sections, are Worker 1, Worker 2, Worker 3, Worker 4, Worker 5, Manager 1 and Manager 2.

### **iii. Documentation analysis**

Several documentary sources were used. These included Makhado municipal minutes and policy documents, Ben Lavin Reserve documents and constitution, and online newspapers. It should be noted that this approach of gathering data was used for ascertaining how the CBNRM programme was implemented and how it is managed.

## **3.2.3 Data collection instruments**

### **i. Interviews**

Interviews were used to collect data. The interview guide was used. It allowed the respondents to talk freely and express themselves with restricted guidance, using both English and IsiNdebele. The researcher is comfortable in both languages and so there was no need for translation. To allow the respondents to relax, a few introductory questions were asked, such as "How are you? How is the family?" This allowed the researcher to introduce herself, and share basic information about the research with participants. Thereafter, all the ethical procedures were followed.

A digital recorder was used to record the conversations, with the full consent of the respondents. It was easier to converse with the interview respondents, as they understood the language used by the researcher. The guiding questions focused on the implementation of the CBNRM programme, challenges in the management of the programme, and attitudes of the community towards natural resource conservation. The age and demographics of the respondents were not sought, since the researcher used all the available staff at the reserve.

### *Interview evaluation*

This method is handy in gathering data that did not come out in documentation analysis. It was utilised because face-to-face interviews provide instant feedback and gives room for clarity, they offer the researcher both verbal and non-verbal responses, and they give the researcher room to solicit more information.

#### **ii. Documentation analysis**

In addition to the interviews, a documentation search, also referred to as a 'records method', was also used to collect data. It involves mobilising already existing data produced during the daily activities of people.

### *Documentation search evaluation*

A documentation search has its own merits and demerits. The following considerations led to the choice of this technique:

#### *Merits*

- Researcher acted independently from the respondents' bias. While in some cases documents were requested from the respondents, some were obtained from the websites.
- No reliance on the memory of individuals, as sometimes recalls may not be accurate, although not always intentionally.

#### *Demerits*

- Time consuming in nature, in the sense that after reading the entire document one may not find much information.
- Written material is secondary information.

The above techniques were selected after considering the pros and cons of each. Using techniques with the knowledge that weaknesses exist, strengthens the resolve to be objective and thorough in the process of data gathering.

### **3.3 DATA ANALYSIS**

The researcher used a qualitative research method for the study. The data sources were interviews and documentation (such as minutes) from the nature reserve's management. Content analysis undertaken through Excel was used to create themes that emerged from the interviews, and where necessary, direct quotes to narrate the theme in detail, were used. Documentation analysis triangulated the data from the interviews and, where necessary, sources from the Internet and minutes were also used, and presented in boxes or as direct quotes as well. Bengtsson (2016) asserts that the content analysis method enables the understanding of data by reducing it to manageable text, and then classifying it into groups and categories. It is the method of data analysis chosen for this study, because it directly examines communication using text, and allows a closeness to data.

### **3.4 ETHICAL CONSIDERATIONS**

This research involved interaction with people and their environment, therefore the researcher was obliged to conduct the research ethically. Mouton (2001) states that conducting the research ethically means that the researcher is expected, by the research community, to do their research responsibly. In this case, the research should not in any way harm their subjects, but respect their privacy and rights, and the respondents should consent to participation. The UNISA ethical forms, clearance number 2018/CAES/019, were used to make sure that ethical procedures were followed.

The researcher took note of the right to privacy as the main ethical consideration in face-to-face interviews. The right to privacy states that respondents have the right to refuse to be interviewed or to answer certain questions (Mouton, 2001). The researcher explained the importance of the research to the respondents, in order to familiarise them with the interview process. The researcher therefore stressed the safety, confidentiality and protection of the identities of the respondents, and should they prefer to remain anonymous, their identities would not be disclosed. The respondents were given enough information on the study through the information sheet provided by the researcher, and, in a briefing before the interviews, guiding questions were given. It was carefully explained

that it was within their rights to refuse to respond to questions they deemed sensitive. The researcher again reassured the respondents that they would remain anonymous, and made use of pseudonyms to protect their privacy.

### **3.5 LIMITATIONS**

The limitations of the study are mainly centered on issues of the methodology that was used. The respondents were selected as per the researcher's convenience. This may have led to underrepresentation of respondents who were timid, or overrepresentation of respondents who were outspoken. To overcome this limitation, the researcher was patient with those who were shy, and asked to interview them at a time convenient to them, after having gone through some guiding questions to which they were expected to respond.

### **3.6 CONCLUSION**

This chapter presented the research design, methodology adopted and procedures followed in carrying out this study. The evaluation of the methods used was also discussed. The theory and practical evidence of CBNRM programmes in and around South Africa, provided in the previous chapters, informed the selection of appropriate research methods to achieve the study's objectives. This research methodology discussed data collection methods, instruments and procedures used in carrying out the study. In any scientific research, the worthiness of the findings depends largely on the manner in which data is collected (Nsingo, 2006). Four sources of data were used. The first three relate to primary data sourced via interviews with the management and staff of the Manavhela Nature Reserve and the community representatives. The researcher scheduled meetings and carried out the interviews at the respondents' workplace and residence. All the responses were recorded for analysis in the next chapter. The fourth source was secondary data harvested through desktop research. Based on the data found, textual and/or content analysis was used for analysis.

## CHAPTER 4

### FINDINGS

#### 4.0 INTRODUCTION

This chapter documents the case study presentation from the fieldwork and secondary research. The chapter commences with a discussion of the background and history of the Manavhela Nature Reserve, from before the forceful removal of the community, to the time the villagers were reinstated as rightful owners of the land. Understanding the history of the reserve is important in this study, as it seems to have influenced the current settlement pattern of the Manavhela communities, and thus had an impact on the management of the CBNRM programme. Implementation of the CBNRM programme and challenges in the management are also outlined in the chapter.

#### 4.1 DATA ANALYSIS

The study used the qualitative research method to analyse the data. The data sources were field interviews (see Table 1) and documents such as minutes from the nature reserve management. Content analysis was done using Excel to create themes that emerged from the interviews, and, where necessary, direct quotes were used to narrate the themes in detail. Document analysis triangulated the data from field interviews as well as the sources from the Internet and minutes, which are mainly presented in boxes or as direct quotes.

**Table 4.1:** Summary of respondents. (**Source:** Own).

	Community		Nature Reserve Workers						
	Rep 1	Rep 2	Manage r	Superviso r	Caretake r	Range r	Cleane r	Securit y	Driver
Pseudony m	Com . Rep A	Com . Rep B							
Number			Manage r 1	Manager 2	Worker 1	Worke r 2	Worker 3	Worker 4	Worke r 5

## **4.2 HISTORY OF BEN LAVIN NATURE RESERVE**

### **4.2.1 Manavhela settlement before forced removals**

According to Manager 1, people from Dzata, having first moved from Madungeni, settled in Manavhela long before 1900. In this settlement, they became part of the Ramabulana tribe. In 1929, they were forcefully removed without compensation or alternative land. This was done partly through the 1913 Land Act. Since then, this tribe was peripheral to the Manavhela land until 2002, when the land was officially handed back to the community.

The land restitution programme in South Africa aimed at giving back land to victims of forced removals which began at the inception of the Native Land Act No. 27 of 1913 (Okumbor, 2010). Prior to their removal, the community had organised their livelihood on this land in terms of customary law, and enjoyed beneficial occupation rights. Mr. Ben Lavin, a European war veteran is said to have arrived in Louis Trichardt between the first and second world wars in the late 1920s. The Native Commissioner of Louis Trichardt informed the leaders of the community that Ben Lavin now owned the land on which they were living. The community members were then turned into labour tenants in exchange for residency. Those who refused to work were eventually evicted with no alternative land. Com. Rep B provided a background narrative account on the forced removal, as follows:

*"The Manavhela people were staying in the present Ben Lavin Nature Reserve area and were forcefully removed in 1929. The Manavhela brothers split into different directions and in different parts of Vhembe district. The other brother headed to Vuwani area, the other to Mufeba area, the other who was the chief then settled in Kutama. The Manavhela chief lived and was buried in Kutama. Currently, the Manavhela clan is now found even in other parts of Vhembe district like Njelele and Madombija."*

### **4.2.2 Conversion of Ben Lavin family farm to a nature reserve**

Some historical documents of Ben Lavin show that in the late 1960s, the farmers adjacent to Mr Ben Lavin's farm all came together and agreed that the farm should become a

conservation area. The livestock of Mr Lavin was moved to other farms. Animals that the farmers wanted to protect for the future included waterbuck, kudu (*tragelaphus strepsiceros*), nyala (*tragelaphus angasii*), warthogs (*Phacochoerus africanus*), monkeys, (*Macaca fascicularis*), smaller mammals such as wild cats as well as birds and impala (*aepyceros melampus*). After Mr Lavin's passing away, his widow, Molly Lavin, started the process of converting the farm into a nature conservation reserve. She donated the former cattle ranch farm to WESSA, a non-profit organisation. By accepting the terms of donation, WESSA was legally and morally bound to honour Mrs Lavin's wish. Government endorsed the gift to the organization (Ben Lavin Nature Reserve, 2008). The farm Vygeboomspruit 286 LS, comprising about 2600 hectares, was then declared a nature reserve in 1976 (Regional Land Claim Commission 2002).

#### **4.3 IMPLEMENTATION OF THE CBNRM PROGRAMME**

At the implementation of the CBNRM programme in Manavhela, the community inherited a game reserve, together with operational tourist facilities, a running project for broiler production, an abattoir and a piggery. According to Com. Rep B, the new land owners formed a Communal Property Association (CPA) that was set up for the purposes of running the reserve, and the same management structure runs the nature reserve to date:

*"When we were given the land back, we formed a CPA. It is the one that manages the reserve until now."*

WESSA jointly managed the nature reserve, which is basically the largest portion of the land (Okumbor, 2010). The Manavhela community was awarded with a Settlement Planning Grant. However, it is noted that the Manavhela CPA rejected the proposed development plan, and this was deemed an obstacle in future development. The land restitution victory ceremony held at Manavhela community, took place on 13 April 2002, and is detailed in Box 2, below.

**Box 2:** Historic handover of Manavhela Ben Lavin.

On Saturday, April 13, 2002, in what was said to be an historic occasion, one of the region's few private game reserves, the Ben Lavin Nature Reserve, was handed back to the Manavhela community.

The restoration of land to the Manavhela community follows a landmark settlement agreement between the Manavhela Land Claims Committee and the Wildlife and Environment Society of South Africa (WESSA). The claim was filed on August 29, 1996, with the process culminating in a special handing-over ceremony attended by, among others, Adv. Wallis Mgoqi (Land Claims Commissioner), Mr Aron Motsoaledi (MEC for Agriculture), representatives of the Wildlife Society and members of the Manavhela community.

In his speech, Motsoaledi said that being given the land back was just the beginning of the process. He urged the Manavhela community not to follow the same route as other communities who got their land back but later tried to sell it because they could not produce a profit from it. He also warned that although it is their land, the government will not allow anyone to squat on it.

"If you want to live like a king, you must work like a slave," Motsoaledi concluded.

Today, known as Ben Lavin, the claimed land used to be known as Ha-Manavhela and consists of the farm Vygeboomspruit 286 LS and remaining extant portions 1, 2, 3 and 4. At the end of the First World War, members who did not comply with the conditions for staying on the farm were issued with "trekpasses" and ordered to leave the farm. In total, some 600 households, representing about 2 000 community members, were removed from the land".

**Source:** A. Van Zyl Zoutnet, 2010.

Com. Rep B expressed that they would love to pass on this legacy to future generations; therefore, they try and involve the youth in all the affairs of the programme. Some youth

are interested and take up the offer, but some are not keen. Further, Com. Rep B feels some youths simply do not want anything that involves working hard:

*"I personally want the young people to be there and be involved, and then us the elderly people can be there as their advisors, unfortunately some of them are lazy. They do not want to work."*

#### **4.3.1 Government policies at the implementation of CBNRM**

Implementation of CBNRM in South Africa was facilitated by government policy. Based on the Communal Property Associations Act 28 of 1996, the community registered a communal property association (CPA) representing the Manavhela beneficiaries. This enabled them to acquire, hold and manage the property on a basis agreed to by members of the community in terms of a written constitution.

A title deed was signed, and the farm Vygeboomspruit 286 LS was transferred from WESSA to the Manavhela CPA on 25 June 2002. The nature reserve was transferred as an established, viable entity, and could in principle provide employment and opportunities for self-help enterprises. A decision was made to form a joint venture with WESSA. The Manavhela community agreed to maintain the property under conservation principles, while WESSA agreed to help in achieving a smooth transition in ownership, in the interests of conservation. However, all game was to remain the property of WESSA for a transitional period of two years, after which all moveable assets (staff, vehicles, equipment and wildlife) would be transferred to the Manavhela community. Shackleton *et al.* (2002) posit that the state, which includes the local government and various departments, had an interest in the outcomes of natural resource management initiatives, and it was their role to promote a positive outcome for communities from devolved natural resource management.

The community formed an association in terms of Act 28 of 1996, and referred to it as Manavhela Community Property Association. Subsequently, the drawing up of the constitution followed. In Box 3, below, is an extract from their constitution:

**Box 3:** Affairs of the Manavhela Community Association.

The affairs of the Association shall be managed by the management committee (MC). Reporting to this MC shall be various sub committees handling the affairs of the various sections of the Association e.g. Housing and Services, Agriculture, Commercial and Nature Reserve. These sub-committees will be appointed by the MC and should consists of at least a Chairperson, Treasurer, Secretary and Additional members. The sub-committees will serve for the period equal to the term of the MC and be subject to revision /replacement at each election of a new MC. Disciplinary and termination measures will be effected by the MC as part of their responsibilities during the five year period of office. The management committee shall consist of at least ten (10) members including 50% women and 50% youth.

(**Source:** Manavhela constitution, 2008).

According to Com. Rep B, the committee was formed in such a way that each village is represented. The villages that form the Manavhela community are Manavhela Vuwani, Manavhela Mufeba and Manavhela Kutama. Manager 2 added that the current committee is composed of three members from each village. Out of the nine committee members, only one is a woman, and two are youths:

*"The committee is made up of both men and women. Also include young people and the current committee has one woman, and eight men, inclusive of the 2 youths"* [Com. Rep B].

#### **4.3.2 Institutions involved in the CBNRM programme**

According to the written documents sourced from the reserve, WESSA, government institutions, academic practitioners and the community were extensively involved in the implementation of the CBNRM programme. The community benefited from the knowledge shared by one of its members who had studied environmental management. WESSA provided environmental, eco-tourism and entrepreneur training to the community. At the implementation of the programme, people with various expertise were brought in and numerous investors showed a great deal of interest (Ben Lavin Nature Reserve, 2008).

Manager 1 gave the following account:

*"Right in the beginning, they got the land from WESSA, yet WESSA got it for free from Mrs Lavin. They paid a lot of money for it, and they had to work with WESSA, whose emphasis was on environmental training. In the beginning professor this and professor that were involved. One thing again is that it was a small family that sort of took over and one guy had studied environmental management but did not have knowledge, it was a very complex thing."*

#### **4.3.3 Community involvement**

A report provided by Ben Lavin management showed results of research carried out by a Dutch student who came on a voluntary exchange programme in 2008. Part of the research focused on the awareness of the programme by community members. It was revealed that some members of the community understood how the community-owned reserve was being operated, yet some were not knowledgeable. Some findings were provided by Khulile Africa, a non-profit organisation, which carried out research on the Manavhela community in several aspects of the reserve, ranging from community knowledge of the reserve to issues pertaining to financial management of the reserve, and benefits that accrued from the CBNRM programme (Ben Lavin Nature Reserve, 2008). The issues gathered from the research are discussed in detail below.

##### *Knowledge of management practices at the reserve*

It was established that more than half the population do not have knowledge on what a CPA is, and most of them do not have a copy of the constitution. It is clear from the outcome of the research, that there is minimal involvement of the community, as most of them have never received any information relating to the nature reserve. Some do not know their rights and responsibilities that pertain to the reserve. They are also not knowledgeable on who comprises the committee in terms of gender and demographics.

Further, the majority of community members do not know where the funds come from to manage the reserve and pay workers, including any donations made and income from tourists.

#### *Importance of the reserve to the community*

Some members do not know what a reserve is, and have never been to the reserve. However, a substantial number of the community members perceive the reserve as important to them. Some reasons for the perceived importance were that the reserve protects animals, and they get a chance to learn about wildlife. They view it as a tourist attraction with potential to create employment for their members. They also see it as a cultural symbol, and view the land of their forefathers as that which will lead to the betterment of their lives.

#### *Opinion on the decline of tourists*

When the respondents were asked the reasons why the tourists numbers have declined, some of their views were that there is poor management and maintenance of the place, bad working conditions, hiring unskilled people, lack of government support, bad marketing, and lack of community involvement.

## **4.4 MANAGEMENT PRACTICES**

An extract of the minutes on the management of the CPA, held in Mufeba village in October 2008, revealed that the meeting was called by beneficiaries to air their dissatisfaction with the CPA and wanted to see financial reports. There had been no accounting to the beneficiaries since 2002 (Ben Lavin Nature Reserve, 2008).

Worker 1 indicated the following:

*"This perhaps was necessary to improve the management of this place. Remember, the community has to be involved, but they are rarely interested. It has always been hard to inform them concerning the management practices of this place as well as any other matters that have to be taken care of."*

#### 4.4.1 Capacity building exercise

The capacity building exercise was conducted to empower the community members. The invitation to the community was sent through sub-committees, and this proved to be a success as many people attended. Transport was arranged and people were ferried in by buses and trucks. The organising committee consisted of 50 people who assisted with planning, catering and food parcels. Box 4 shows the actual process that was followed to recruit community members:

#### **Box 4:** Recruitment of community members.

The actual process followed at informing and recruiting capacity-building exercise trainees in the community:

- Communication was done with all Manavhela villages through their chiefs, the radio stations, Manavhela sub-committees, youths, schools and churches.
- Individual questioners were designed and interview respondents were identified.
- Field workers were trained by Khulile Africa.
- The criteria for interviews was developed, which included gender, youth, level of skills, multiple skills and experience,
- Interviews were held with about 200 beneficiaries, and monitoring was done by Manavhela staff, youth and Unions.

#### **Capacity building training**

- A total of 40 crafters, which included embroiderers and sculptors, attended a workshop at the Lemana College.
- A hired hospitality group catered for them, as a training exercise.
- Khulile Africa paid for transport, venue and accommodation. Equipment and materials were brought by the presenters
- The workshop lasted 12 days.
- A second workshop was held at the Manavhela Multi-Purpose Centre and was attended by embroiderers, bead workers and sculptors.

**Source:** Minutes from the reserve documents.

The presenters provided all the material that was needed in training. Training was provided to 25 participants on art work, mainly on animals (wild and domesticated), plants, reptiles and insects – dung beetles and locusts. Some women who had some skill in embroidery were selected, based on their existing skills. A total of 15 women participated. Worker 2 confirmed his participation in the capacity building programme by exclaiming,

*"It was great. I managed to learn a thing or two as well. I am sure if those trainings were sustained, people, that is, us workers, and the community, will always be conscious to what we are supposed to do to keep this place well."*

The same sentiments were expressed by Worker 3, who acknowledged that,

*"At first, I thought it was not necessary for me as a cleaner to go through capacity training. But it turned out that I got to know that I am as important as the manager in the success of the nature reserve."*

#### **4.4.2 Challenges in the management of the reserve**

The community is not involved in the management of the CBNRM programme. They lack physical presence, and do not participate in the project's business, partly because they are located far from the reserve and lack financial support from the stakeholders. Manager 1 confirmed that when the programme started and funds were still there, the community showed some interest:

*"People live very far from the reserve because they were moved. Some of them live as far as Njelele. So for them to be involved costs money. How do you get them here? So in the long run people began to lose interest because quite frankly it is impossible to involve them without funding."*

A worker employed as a security guard, Worker 4, reiterated that he –

*"... rarely record(s) any members of the community coming for management meetings. Remember, my job is to manage and check on every one that comes through the gate into the nature reserve."*

According to the 2004 reports available at the reserve, there was a time when the reserve suffered some setbacks. The management of the reserve had been marred by serious challenges. The WESSA volunteers and students with skills who had worked for a period of a year, left the reserve (Ben Lavin Nature Reserve, 2004). Accordingly, lack of experienced personnel and absence of proper management systems resulted in costly and ineffective management practices. Worker 3 indicated:

*"There was a time whether you clean the place or not and no one seemed to care. At times that demotivate to clean at all. The place was really getting bad and I thought I would also quit."*

The reserve manager was said to be a dedicated, hard worker but lacked technical exposure. As a result, training and support by an experienced mentor for housekeeping issues, nature conservation eco-tourism and managerial skills, was needed.

The CPA failed to identify community members who would be recruited as trainees in the reserve, to solve the personnel crisis. Other concerns included abuse of institution vehicles, taking of river sand by some community members without making payments, and some CPA committee members were issuing permission to outsiders for hunting, without proper documentation. Worker 5 said:

*"I would be asked to drive so and so, yet that was supposed to come directly from my manager. It gets difficult when things are not clear and you are a driver."*

Further, the following actions impacted on the ongoing sustainability of the project. First, there was loss of opportunity in accessing some revenues in the form of grants. Second,

there was in-fighting between the manager of the reserve and members of the CPA. The manager was accused of doubling his income, suspending wifi, website, DSTV and emails, and forcing the staff to leave before he left in 2014. In the process, the animals were neglected due to non-operation of staff. In the interim, a new manager was appointed, but she did not last long and left in April 2016. All this resulted in loss of salaries, union membership, contracts, and skilled, experienced personnel, and there was also alleged gender abuse. In the process, the reserve was closed for three months. More challenges are listed below.

#### **4.4.3 Conflicts**

Some community members feel that the reserve will do better if it is led by the chief, yet other community members feel that the current setup – that is, CPA managing the operations, is the appropriate structure.

Com. Rep B had the following to say:

*"Some people are starting to fight now, other people want to run the reserve now. It's best if the chiefs run the place. Before coming to this place our grandfather was the chief there so we think if the chief run the programme it will be better."*

The feeling by the community members emanates from the fact that their forefathers were living under the leadership of their chief before they were forcefully removed, and do not understand why they have the CPA as an authority there. This sentiment that the CPA was not a good structure to run the reserve, and they would rather have the chiefs, was said repeatedly during the course of the interview.

Some conflicts in the communities are about the use of the land as a nature reserve. A portion of villagers want to convert the land to a residential area, and they want to build their homes there. While some, including the community leaders, say that the land should be maintained as a nature reserve because it generates income through its use as a wedding and party venue, and by attracting tourists. There is a lack of coordination between communities, and too much infighting.

Com. Rep B gave the following account of the conflicts:

*"Some people want to make villages where the reserve is. I refused in the meeting and told them that it's better to follow the use of the reserve as it was given to us. There is a business there, schools come for trips, weddings, parties are held there. Also there are animals there, if people build houses there it's not good; it's better to follow the white people who started there and keep it as a business."*

Com. Rep B gave a sense that some community members feel that the presence of white people, who have been managing the reserve since implementation of the programme, does not give a true reflection of total ownership by them, while the leadership feels it is good to have them because there is a need to work together, regardless of race. He said:

*"One of the current administrator of the nature reserve, who is white, did and does help us, a lot. Other people don't want to work with white people but we need them to assist us."*

#### **4.4.4 Lack of knowledge and expertise**

One of the challenges faced by the community-owned programme is lack of knowledge of entrepreneurship by the members, as most people lack training. It is ascertained that it is not only the community that lacks knowledge of running the reserve, but also those in the government offices, who are supposed to provide various support mechanisms to the reserve. Manager 1 mentioned that the government personnel sometimes block interactions between other stakeholders and the community, due to their misunderstanding of the programme. This is done because the government officials are said to think that interactions between stakeholders and the communities are not necessary.

Another drawback is that the programme was not adequately explained to the community at implementation. Worker 1 had the following to say about this:

*"The people lack coordination and understanding of the project. There is no conserving of resources and people are not utilising the reserve's natural resources for their livelihoods."*

#### **4.4.5 Underutilisation of natural resources**

Contrary to the theory that common pool-resources are under threat of being over-utilised, the natural resources are not utilised at all at Manavhela. The reserve management had problems with encroaching bushes, because the old trees are not cleared – which is now even becoming dangerous to animals.

The community does not harvest thatching grass. The community leaders believe that grass is for animals, and cannot be given to the people. At some point, fully-grown dry trees were cut into firewood and given to the people; however, the community members did not collect this wood, citing that it was too expensive to hire transport as the place is far from their villages. Com. Rep B said:

*"I have not seen anyone asking for medicinal plants ... As for the grass it cannot be given to people because it is food for the animals so people cannot harvest it. At some point, wood was gathered because we were clearing some walkways. People were informed but did not collect the wood citing distance and transport costs, I think people are just lazy they don't want to work."*

#### **4.4.6 Lack of funding**

The project is underfunded, and the tourist activities are not bringing in any money. The restaurant and curio shop are no longer working. The chalets are dilapidated and need major refurbishment. The driveway from the gate to the camping area is full of encroaching bush. Manager 2 indicated:

*"... people were given funds when we started, but the funds have stopped. We want funds to help us to go forward."*

Further, people who had once visited the tourist centre had an unpleasant experience at the reserve. Unfavourable comments by one of the tourists who visited the place in 2017, are given in Box 5 below:

**Box 5:** Comments on the nature reserve.

Reviewed 30 November 2017

Don't go

This place is a "no go" unless you want your car to be scratched from front to tail.

Only the staying and lavatory area are maintained pretty well, the rest of the park roads, because of the bush are so narrow your car gets scarred by the bushes anywhere you go throughout the park. We did not see any animal at all and just a few birds during our visit. So be warned, and know what to expect if you take the risk.

*This review is the subjective opinion of a TripAdvisor member and not of TripAdvisor LLC*

**Source:** TripAdvisor online.

Working conditions are no longer the same, Worker 3 compared his experience of work at the reserve before the programme was implemented, and now:

*"I started working here in 1997, we were given 3 uniforms per year, safety boots and mealie meal and meat then, but now this is no longer happening."*

#### **4.5 SUCCESSES ACHIEVED BY THE CBNRM PROGRAMME**

There have been many positive achievements attained by the nature reserve throughout its period of existence. The skills development training carried out at the reserve enriched community members with various skills. The communities benefited from the financial proceeds from the reserve, and built a community office in each village – that is, in Kutama, Vuwani and Mufeba. Community members had been gainfully employed at the reserve since the implementation of the programme.

Com. Rep B indicated:

*"The community benefits from the proceeds of the reserve. Three years ago all communities were given money to build their offices, we also built ours here at Kutama, there at Mufeba and Vuwani also build an office. They don't give any cash to the people but build something that benefits the whole community. We employ people from our community who have some qualification."*

The reserve management confirmed that the programme had a very good start, though it is failing now. At implementation, the community inherited a poultry and piggery project that failed, due to lack of funding as described by Worker 2. This ascertainment can be challenged on the grounds that these projects are supposed to be self-sustaining. Nonetheless the workers believe that they need assistance first before they get to the stage of self sufficiency. As such Worker 1 is still optimistic that if the reserve receives government assistance, the projects can be revived. The same is true for Com. Rep B, who gave the following account:

*"The programme was good when we started, but now is not doing well, the problem is when we were given this place, we were given some project there, chicken project and some project was doing well... we do not have the project anymore because of lack of funds. If the government could give us funds, I think we can renew some chicken project and cash crop."*

The community leaders expressed that, as a community, they really need all kinds of help; even academic help would be greatly appreciated:

*"Don't forget us, help us, when you have finished your studies, give proposals to the people who can help us" [Com. Rep A]*

#### **4.6 ATTITUDES TOWARDS PROTECTED AREAS**

Some community members felt they would rather build their homes where the reserve is situated. That is, the members are willing to give up the nature reserve in exchange for a residential home; that way they will feel they own the place. Therefore, they do not see the need to conserve the resources, but would rather get rid of them. However, there is

evidence of poaching, and the animals at risk are nyala, wildebeest and impala. The workers confirmed that they find snares all around as they do their routine checking.

Worker 2 said:

*"There is poaching taking place here at the reserve ... we have never apprehended anyone but we have found dead animals and snares around the reserve."*

The other issue that has made it easy for poaching, is the fact that the other part of the reserve fence is broken, and that makes it easier for poachers to access the reserve. The nearby villages, Elim and Madombizha, which are not part of the Manavhela people, are said to be the main culprits in the poaching activities:

*"People who stay near the farm like Elim, the nearest place, they go and poach and vandalise the fence. The fence needs to be fixed or else people will poach and kill all the animals."* [Worker 4]

#### **4.7 CONCLUSION**

Before the forced removal from their land, the Manavhela community enjoyed the use of their natural resources under customary laws. After obtaining their land back, several stakeholders were involved in the management of the wildlife reserve, and they formed management structures guided by government policies and their own constitution. The CBNRM programme was successfully launched; however, the management of the programme has been marred by obstacles of various magnitude, including absence of the community in the reserve, lack of knowledge, lack of skills, mismanagement and conflict. The project has empowered the community by capacity-building programmes which includes skills training. Due to non-availability of the community in the reserve, the natural resources are underutilised. There is evidence of poaching at the reserve by people who live close by.

## CHAPTER 5

### ANALYSIS OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

#### 5.1 ANALYSIS OF FINDINGS

##### Objective 1:

*To assess the implementation and management of CBNRM in Manavhela.*

The study analysed how the CBNRM programme was implemented and managed in Manavhela community. Of particular interest was the handing-over ceremony of the programme, which denotes devolution of power from the central government to the community. This enabled the community to formulate their own constitution that governs their day-to-day running of the CBNRM programme. The transfer of the entity to the community was done successfully; however, some practical complexities on the ground were not taken into account, or ignored. The management of the CBNRM programmes requires that the community be present and be involved in the day-to-day running of the programmes. On the contrary, the programme in Manavhela lacks community presence. The location of the Manavhela settlements is far away from the nature reserve. This makes the whole project unmanageable because of the costs involved in travelling to and from the reserve. It turns out that members are not willing to incur the cost. Yet, the success of CBNRM programmes depends on active community engagement (Löwegren, 2013).

Lack of consideration for the real issues at hand in implementation paralyses the community conservation principle that not only relies on communities to actively use the resources, but also to plan, implement and evaluate the CBNRM programmes. In the case of Manavhela there was a generalisation of the programme at implementation. Due to the community's remoteness from the nature reserve, it is inevitable that a different

approach to managing the conservation programme be adopted, particularly in improving accessibility to the nature reserve by the community.

Kumar (2005) posited that the community cannot be generalised, but should be treated as an isolated case, to avoid hindrances in the running of projects. Thakadu (2005) highlighted that the people best placed to conserve and manage resources are those living with the resources. This is not the case with the Manavhela people. The Madombizha and Elim communities, which are not the beneficiaries, live closer to the reserve than the Manavhela community, who are the rightful owners of the land, but using the resources is proving impossible for them.

## **Objective 2:**

*To assess the challenges of CBNRM versus the management processes in place that either overcome these challenges or assist in making sure that the CBNRM remains a going concern (in spite of challenges)*

The management of the CBNRM programme in Manavhela faces numerous challenges, some of which are common to some CBNRM in the region, while some are rooted within the community itself. The CBNRM programme establishes new institutions that are prone to challenging the existing customary institutions, posing a substantial conflict potential. This research identified the management challenges between the CPA leadership and the customary establishment.

Firstly, the CBNRM committee accommodates gender and demographic differences. In Manavhela, the constitution states that women should also have 50% representation, and the youth also should not be left out. The reality on the ground is not accommodative of women and young people. The youth are seen as lazy people who do not want to work.

Secondly, the people do not think the CPA management should be taking the leading role in managing the nature reserve. Research gathered from community members reveals that the Manavhela community feels that the chief should take control of the natural resource management, since the reserve is their ancestral land, where their ancestral

legacy should be restored to its original state. In a related CBNRM case in Zambia, the local chiefs strongly resisted plans to introduce a new revenue-sharing scheme, where they “stood to lose the most”, wherein the conservation programmes that are governed by committees tend to weaken customary institutions/traditional leadership decision-making powers (Child, 1996).

One particular point to note is the sentiments expressed by the community representatives on how they want the chief to take over the management of the CBNRM programme, instead of the CPA. Management of natural resources and resolving of conflicts are part of the chieftaincy duties accustomed to by the community, yet CBNRM brings about a new way of managing community resources, through the CPA committee. The involvement of the CPA in this case is foreign. For the community to feel that their land was restored fully to them, they need to have full control over it by having their traditional leadership restored.

In one case stated by Zunza (2012) on the CAMPFIRE programme, the traditional leaders misused the benefits accruing from the projects, because they viewed it as a government programme. For smooth running of projects, there should be a separation between local leadership and the CPA to avoid abuse of power. Additionally, where a healthy working relationship exists, traditional leadership is consulted if needed, and informed on the activities and progress of the projects. Undermining the power possessed by traditional structures headed by the chief in most CBNRM programmes, stifles the progress of the established CPA committee.

Among the challenges in the management of CBNRM projects analysed by the researcher, it was uncovered that the community lacks skills in the management of the resources. Local knowledge is a vital part in the management of natural resources in nature conservation. Where the community lacks such ecological knowledge of their natural resources, a devastating result occurs, and where the community is well acquainted with how nature works, they tend to conserve it. If the grass is not harvested because the community representatives feel that it should be left untouched by the community members, this has an effect on the growth, as some plant species thrive by being cut back by harvesting or fire.

Phutego and Chanda (2004) highlighted that understanding the ecology of nature has helped the Bakgalagadi and Basarwa communities in the management of their animals. Male hunters relied heavily on the behaviour of animals, breeding periods and environmental conditions. They practiced selective hunting, which has positive conservation implications.

### **Objective 3:**

*To determine how the CBNRM has influenced the community's attitude towards natural resources.*

The researcher analysed how the CBNRM that has been managed by the community for decades, has influenced their attitudes toward natural resource conservation. The sentiments expressed by the community to turn the reserve into a residential space, where they would build homes and get rid of the natural resources, depict a negative attitude towards natural resources. The community loses money in accessing the reserve, and derive no benefit from the activities of the reserve, hence the thought that the conversion to a residential area could be more beneficial to them.

The CBNRM ideology assumes that the local community has greater interest in sustainable use of natural resources around them than distant government or private institutions. They are presumed as having a greater understanding, as well as a vested interest, in their local environment, and hence can manage natural resources through local and traditional practices. In the case of Manavhela, the community is as distant as all other stakeholders.

The research reveals that the community members do not understand their roles and responsibilities, and, therefore lack the interest and skills necessary to manage an ecotourism enterprise. The failure to recognise any benefits from the reserve, cultivate a spirit of lack of ownership and the development of negative attitudes towards the continued existence of the reserve. Silva and Mosimane (2013) affirm that the success of

CBNRM is heavily dependent on the community receiving economic benefits; this lures them to adopt land use activities that are consistent with tourism and conservation goals.

Even though the community is a bit distant in terms of managing the reserve, they do not have an attitude of depleting the resources of the reserve. This is to an extent that they do not even scramble for firewood that at times does come from the reserve each time the bush is cleared for accessibility of both animal and human movement.

## **5.2 CONCLUSIONS**

At the implementation of the CBNRM programme in the Manavhela community, the reserve had an established piggery business and ecotourism projects that were meant to benefit the community. There were specific institutional arrangements put in place to manage the programme at community level and between other stakeholders. There was high exposure through the media that attracted other funders who, in the beginning of the programme, had shown interest. The following are the conclusions of the study:

The study concludes that, at its implementation, the CBNRM programme had prospects of being a viable ecotourism venture and conservation area. Various CBNRM institutions were involved, which is in line with the assertion by Shackleton *et al.* (2002) that stakeholders such as NGOs are crucial at implementation and in management of projects, as they assist in facilitation, capacity building and neutralising conflict. Further, the ceremony held on 13 April 2002 denoted the devolution of power, where the management of natural resources was transferred to the community. Such reform acts as an incentive to local communities and enables them to invest collectively in natural resources (Boonzaaier, 2012). The other indicator of successful implementation was the formation of the CPA in accordance with the Communal Property Association Act. This enabled them to draw up their constitution, which stipulated how the property would be managed.

It can be concluded that the community is not interested in the affairs of the reserve. The contributing factor could be the proximity of the community settlements to the reserve. The communities are settled in three different villages that are far from the reserve. Living

away from the reserve makes it very costly for the communities to benefit from the natural resources in the reserve. When the communities are not involved, they lack a sense of ownership of the programmes (Sebele, 2010). Thus the people of Manavhela feel they should be allowed to build their homes on the reserve land, then they will feel as if they belong.

Further, the communities do not understand their rights and responsibilities; this could have been caused by inadequate explanation of the programme at implementation. The whole programme therefore lacks coordination and proper understanding on the part of the community. The essence of CBNRM is to offer a holistic development approach that ties together economic benefits to resource conservation and development of local institutions (Ogbaharya, 2006). On the contrary, the Manavhela people are not getting improved livelihoods from the reserve. This defeats the whole purpose of setting up a CBNRM programme.

The research concludes that lack of capital was the main drawback to the management of the CBNRM program. Fabricius and Collins (2007) highlighted that there is a high rate of failure in CBNRM initiatives predominantly in their early stages of development, and the failure could be partly attributed to shortage of capital in rural areas. However there is also a risk that capital injection may only benefit a few people if it is not managed very well. There is scarcity of entrepreneurial and managerial skills, and this makes it difficult to manage the reserve, as the members lack knowledge and expertise.

To worsen the burden, the government, which is supposed to provide support mechanisms, is failing the reserve by blocking the interactions between the community and interested stakeholders. This is all caused by what the reserve management says is a lack of understanding of the programme on the part of the government. There are leadership conflicts; the community would prefer the community leaders to take over the management role of the reserve, instead of the CPA. In cases where the traditional leaders and CPA worked together, there has been better progress, as the responsibilities are shared among these institutions. Robins and Waal (2008) highlight one case where

the tribal authority's duties were to manage community issues, indigenous laws and tribal levies, thereby working together with the CPA to realise the goals of the programme.

It can be concluded that in order to maintain the CBNRM project's viability, some efforts were made to empower communities with skills to run the reserve. A capacity building exercise that was carried out to equip the community members with the necessary skills to run an ecotourism programme, shows that the management of the CBNRM programme was in line with CBNRM principles. The principles of the CBNRM state that CBNRM institutions need to ensure that human capital is developed, in order to enhance livelihood security. This encompasses skills, knowledge, ability to labour and good health. Invitations to get participants was done intensively through all channels that could reach all community members through their chiefs, radio stations, Manavhela sub-committees, the youth, schools and churches. The recruitment procedure of the trainees was done in a fair manner and it took cognisance of gender issues, the youth, skills levels and experience.

## **5.3 RECOMMENDATIONS**

### **5.3.1 Recommendations to improve community participation**

Extensive educational campaigns aimed at teaching people about community-owned programmes could help the community to have a better understanding of the project. The CPA, the reserve's management and the traditional leadership may organise and facilitate such campaigns. This could lead to increased interest from community members, and better accountability by stakeholders.

### **5.3.2 Recommendations to the CPA**

In order to improve sustainable wildlife conservation, the CPA and the community need to have a healthy relationship. Poor relations leads to poor attendance in meetings and lack of interest in reserve activities. The relations can be improved through effective communication, and the community needs to be informed.

### **5.3.3 Recommendations on attitudes towards conservation**

In order to enhance positive attitudes towards natural resource conservation, communities need to reap more benefits, rather than incur costs, from participating in CBNRM programmes. In cases where they have incurred costs while pursuing CBNRM projects, they tend to develop negative attitudes. Some benefits that the community can get from the reserve includes assistance in funerals, scholarships, and support for local initiatives. Thus, the community will feel that they are the real owners of the programme.

### **5.3.4 Recommendations on livelihoods**

The current activities at the reserve are too small to generate a substantial livelihood for members of the community. In order to realise substantial benefits from CBNRM projects, the stakeholders need to refurbish the accommodation, re-open the curio shop, and increase marketing campaigns.

### **5.3.5 Recommendations to improve conflict**

The programme lacks coordination, and special facilitation will help both the CPA and community in coming together to achieve their goals. In order to bring the community back into the CBNRM, a step-by-step process can be followed, starting with what the community already knows, moving to advanced issues, which include familiarising them with the policy, ecotourism venture and conservation issues.

## **5.4 SUMMARY OF THE CHAPTER**

The shift of nature conservation from that of coercive resource preservation to that of community management, changed the face of conservation to that which engaged participation, indigenous knowledge and addressing community needs. The findings of the research detail the way in which the CBNRM programme was implemented at Manavhela community, and addresses the main issues in the management of the natural resources, thereby coming to the conclusion that the community remains aloof, even if the model of the project so demands their involvement.



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# APPENDICES

## Appendix 1: Ethics letter

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UNISA  
UNISA GENERAL RESEARCH ETHICS REVIEW COMMITTEE

Date: 19/02/2018

Dear Ms Dufuleya

**Decision: Ethics Approval from 16/02/2018 to 31/01/2019**

Researcher(s): Ms S Dufuleya  
SD12333@unisa.ac.za

Supervisor (s): Mr S Mtshali  
S1102@unisa.ac.za; 011-471-2841  
Prof K Maemo  
maemo@unisa.ac.za; 011-471-2973

**Working title of research:**  
A case study of community-based natural resource management in Matshwabela community in Limpopo Province, South Africa

**Qualification:** MSc Nature Conservation

Thank you for the application for research ethics clearance by the Unisa CAES General Research Ethics Review Committee for the above mentioned research. Ethics approval is granted for a one-year period, **subject to submission of the relevant permission letters and clarification.** After one year the researcher is required to submit a progress report, upon which the ethics clearance may be renewed for another year.

**Due date for progress report: 31 January 2019**

Please note the points below for further action:

1. The researcher should obtain permission from the community leaders involved before approaching any community members. This must be submitted to the Committee for record purposes.

UNISA  
University of South Africa  
Pretoria, Rustenburg, Midvaal, City of Tshwane  
PO Box 93, 0001, South Africa  
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2. Permission must first be obtained from the Wildlife Society of South Africa before contacting any of its employees for information. This must be submitted to the Committee for record purposes.
3. The researcher is requested to motivate why only one focus group will be held. (Normally in qualitative research focus groups are held to a point of saturation, in order to ensure the trustworthiness of the information.)
4. The consent form should be amended to reflect that the researcher will take photographs, and indicate what will be photographed.
5. How and where will the recorded interviews be stored?
6. The risk section in the ethics application form, Section E, was not completed. All research involves possible risk to the researcher and to participants. The researcher is requested to identify the possible risks involved in this research, and to indicate what measures will be put in place to mitigate these risks.

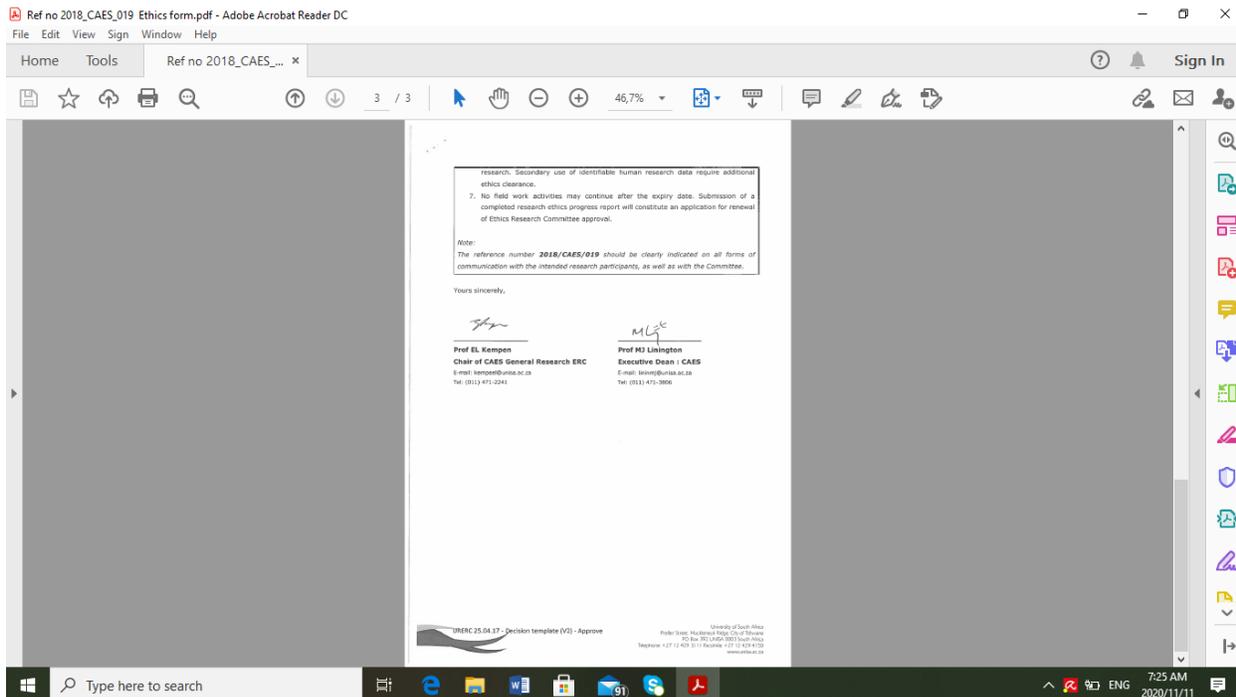
The **low risk** application was reviewed by the CAES General Research Ethics Review Committee on 16 February 2018 in compliance with the Unisa Policy on Research Ethics and the Standard Operating Procedure on Research Ethics Risk Assessment.

The proposed research may now commence with the provisions that:

1. The researcher(s) will ensure that the research project adheres to the values and principles expressed in the UNISA Policy on Research Ethics.
2. Any adverse circumstance arising in the undertaking of the research project that is relevant to the ethicality of the study should be communicated in writing to the Committee.
3. The researcher(s) will conduct the study according to the methods and procedures set out in the approved application.
4. Any changes that can affect the study-related risks for the research participants, particularly in terms of assurances made with regards to the protection of participants' privacy and the confidentiality of the data, should be reported to the Committee in writing, accompanied by a progress report.
5. The researcher will ensure that the research project adheres to any applicable national legislation, professional codes of conduct, institutional guidelines and scientific standards relevant to the specific field of study. Adherence to the following South African legislation is important, if applicable: Protection of Personal Information Act, no 4 of 2013; Children's Act no 38 of 2005 and the National Health Act, no 61 of 2003.
6. Only de-identified research data may be used for secondary research purposes in future on condition that the research objectives are similar to those of the original research.

UNISA  
UNISA GENERAL RESEARCH ETHICS REVIEW COMMITTEE

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## Appendix 2: Interview guide

### Interview guide: The community chief/representative

1. How was CBNRM implemented in Manavhela?
2. Who was given the responsibility to manage the implementation of the initiative?
3. How is the CBNRM programme managed?
4. Is the community benefiting from the resources in the protected area? How?
5. Do the community harvest the resources freely, or there are regulations and restrictions?
6. What challenges, if any, have you experienced from the time the initiative was set up until now?

7. Would you say the programme is successful or unsuccessful?

<b>Interview guide: Management of Ben Lavin wildlife</b>
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1. What natural resources do you have in the protected area?
2. How dependent is the community on the resources in the protected area?
3. How are they managing resource harvesting?
4. Are there any conservation strategies in place?
5. Are there illegal or trespassing incidents in the wildlife?
6. How are the wildlife and the community jointly managing the resources?

<b>Interview guide: Workers Ben Lavin</b>
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1. How was Manavhela before 2002?
2. What was the relationship between the community and the reserve?
3. Were people conserving the resources then?
4. How is the relationship between the community and the reserve now?