TRANSBOUNDARY LANDSCAPES AND RURAL LIVELIHOODS: A CASE STUDY FROM THE NORTHERN KWAZULU-NATAL AND MOZAMBIQUE BORDER

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DECLARATION

I know the meaning of plagiarism. I declare that all of the work in this dissertation (or thesis), is my own and all sources have been properly referenced. Each significant contribution to, and quotation in, this dissertation from the work, or works, of other people has been attributed, and has been cited and referenced.

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Abstract

Transboundary landscapes were introduced to southern Africa through colonialism and persist in the present day. These transboundary landscapes are constructed through political boundaries separating states as well as through the linkage of nature reserves and game parks located in adjacent countries. These landscapes have caused shifts in the livelihoods of the rural communities existing near them. This is the case for the Mbangweni rural area in northern KwaZulu-Natal in South Africa. This rural area, located in a transboundary landscape formed by the national border that separates Mozambique and South Africa, sits in between Ndumo Game Reserve and Tembe Elephant Park. The proposed linkage of these two nature reserves to each other and to the Maputo Special Reserve in Mozambique seeks to create a transboundary landscape that has negative consequences for the livelihoods of the Mbangweni community.

Through the analysis of this rural community and the nature reserves on either side of it, this research sought to enhance understanding about how rural communities interact with transboundary landscapes, as well as the perceptions held by these rural communities and other actors (especially within the conservation sector) about how these landscapes influence rural livelihoods as well as the consequences of these landscapes on rural livelihoods. The study sought to also understand the level of institutional fit and interplay that exists between the institutions that govern over this landscape as well as between the institutions and the lived realities of the Mbangweni community by documenting the historical and current transboundary livelihood practices of the people of Mbangweni, determining the manner in which government actors and conservation authorities perceive and conceive of the transboundary landscape, determining whether or not (and to what extent) local and government perceptions about the transboundary landscape in Mbangweni are similar, and if not, how that affects livelihood activities on the ground and visually mapping out the different perceptions of the landscape held by the Mbangweni community and associated governing institutions. Qualitative data collection methods were used. These included 10 oral history interviews, 2 focus groups and 3 key informant interviews.

The findings of this study reveal that the initial establishment of the transboundary landscape in this region led to the separation of the population of the Maputaland. The communities in northern KwaZulu-Natal and those in southern Mozambique once lived as a single population group. The national border separating South Africa from Mozambique was introduced and forced some of the population to settle on one side of the border and the rest on the other side. Although initially very rigid, the border's laws now allow for the informal movement of people and trade of goods between the southern Mozambique and northern KwaZulu-Natal areas. The study, therefore, found that the border's porous nature had a positive impact on the livelihoods of the people of Mbangweni.

The findings also revealed that in addition to the national border, other institutions and entities were considered important for the livelihoods of the community. These institutions and entities include the

traditional authority, the local municipality and the nature reserves adjacent to the Mbangweni community. These key role players each contributed to and impacted the rural livelihoods with the traditional authority having the biggest influence and most positive impact, the local municipality having the smallest influence and not much of an impact and the nature reserves having relatively minimal influence on the daily conduction of livelihoods but the most negative impact on how these livelihoods are conducted and sustained. Furthermore, the study showed that the key role players hold differing perceptions of the landscape and that these perceptions also differ from those held by the Mbangweni community.

The study showed that the disconnect in perceptions of the landscapes results in isolated and fragmented land use by the entities and institutions occupying the same space. Conflict then arises due to the entities understanding and viewing the landscape as a space for different priorities. The nature reserves and their governing institution prioritise natural resource conservation and the Mbangweni community and the traditional authority, as its governing institution, prioritise their livelihoods and access to natural resources. These differing perceptions of the landscape perpetuate the institutional misfit and lack of interplay between the entities and governing institutions.

The study found that even with different understandings of the landscape they occupy, each entity and relevant governing institution have the potential to facilitate institutional bricolage which would require adjustments of and changes to their mandates and goals to accommodate the mandates and goals of other institutions, other entities as well as the lived realities of the Mbangweni community. By fostering this bricolage, a transboundary landscape that adequately serves the needs and purposes of all its entities, whilst minimising opportunities for conflict between them, would be created.

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List of Acronyms

CBNRM	Community-based Natural Resource Management
EKZNW	Ezemvelo KZN Wildlife
Lubombo TFCRA	Lubombo Trans-frontier Conservation and Resource Area
NGR	Ndumo Game Reserve
NTF TFCA	Ndumo-Tembe-Futi Trans-Frontier Conservation Area
TBCA	Transboundary Conservation Areas
TBDA	Transboundary Development Areas
TBNRM	Transboundary Natural Resource Management
TBPA	Transboundary Protected Areas
TEP	Tembe Elephant Park
TFCA	Transfrontier Conservation Area
UNESCO	United Nations Educational, Scientific and Cultural Organization

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Chapter 1: Introduction

1.4 Introduction

Transboundary landscapes were first introduced in Southern Africa when political boundaries were established during the nineteenth century by colonial governments in various parts of Africa (Mayoral-Phillips, 2002; Thakholi, 2016). Borders and boundaries were formed as geometric and linear projections on geographic maps and/or followed the shapes of geographic features such as rivers, lakes and mountain ranges (Mayoral-Phillips, 2002). There is evidence that the construction of borders and boundaries has brought about challenges to the livelihoods of rural communities[1] dependent on particular livelihood activities and resources found on either side of the borders/boundaries (Thakholi, 2016). Furthermore, communities existing adjacent to borders between countries and provinces may have historical and contemporary ties to one another. Such communities may still conduct livelihood activities across the borders despite the imposed restrictions and laws of these borders and boundaries (Mbatha, 2018). As such, landscapes and livelihood activities created and constructed across borders have come to be respectively known as transboundary landscapes and transboundary livelihoods (Mayoral-Phillips, 2002; Thakholi, 2016). A transboundary landscape, therefore, is created when livelihood or nature conservation activities are conducted and resources are shared, across a national border, between communities and conservation sites existing right at the edge of the border (Ramutsindela, 2004; Thakholi, 2016). This study, therefore, also defines transboundary landscapes as the space or area of land between two countries– South Africa and Mozambique in this case– separated by a national border. This space or area is populated by historically linked population groups on either side of the border who share resources with each other and conduct livelihood activities across the border. In addition, this study also defines a transboundary landscape as that which has nature conservation activities linked to each other across the national border.

In more recent years, several natural resource management areas in southern Africa, such as the Lubombo Transfrontier Conservation Area (TFCA), the Great Limpopo TFCA as well as the Maloti TFCA, have become a part of transboundary landscapes (Peace Parks, 2011; Thakholi, 2016). Transboundary conservation areas, tansfrontier conservation areas and Peace Parks are growing initiatives within the global environmental conservation narrative (Peace Parks, 2011). However, rural communities that share their landscapes with transboundary conservation activities in southern Africa have raised concerns around rural community and rural livelihood negligence where transboundary resource management is initiated and established (Mayoral-Phillips, 2002; Thakholi, 2016, Mbatha, 2018). The lack of benefit sharing, community development and rural livelihood empowerment has

[1] The term “Communities” or “Community” in this thesis is used to refer to the local people who occupy an area within which they conduct their livelihood activities – the Mbangweni area, in this case– and a group of people who reside within a defined traditional authority or under one chief.

called into question the long-term sustainability of transboundary conservation management and action plans (Mayoral-Phillips, 2002). These concerns stem from the limited community consultation and community involvement in management plans (Mayoral-Phillips, 2002).

Furthermore, the conflict around transboundary conservation management may partially be attributed to political agendas interfering with and potentially threatening rural communities' wellbeing and legacies. The political and conservationist agendas portray Transboundary Protected Areas (TBPAs) as initiatives that positively contribute to the landscape, aesthetically and economically, whereas local communities may resist against fences and boundaries alienating them from their land and natural heritage. Conflict between rural communities and conservationists, therefore, arises as communities fight against their exclusion from decision-making processes as well as the potential threats that their cultural heritage may face from TBPAs. The loss of access to land and space as well as the lack of transformation in colonial institutions governing community-based natural resource management (CBNRM) initiatives also contribute greatly to conflict between communities and the relevant TBPA governing institutions (Metcalfe, 2003; Meer & Schnurr, 2013).

The study focuses on the impacts of borders and transboundary landscapes on rural livelihoods. More specifically, the study explores the impact of national borders and (transboundary) conservation on the rural livelihoods of communities– adjacent to transboundary conservation areas– separated by these national borders. To reflect the impact that conservation has on rural livelihoods, an analysis of the role played by conservation in transboundary landscapes is done. It is important for this study to understand the impact of transboundary landscapes on rural livelihoods. The construction of transboundary landscapes may disrupt the livelihoods of the rural communities that exist at or near the borders between countries or boundaries of TBPAs. Groups of people living at these borders and boundaries may have been separated from vital resources used to conduct their livelihoods. It is, therefore, important to understand the degree to which this separation, by the national border and conservation boundaries, altered the livelihoods of the rural communities. There are a few other studies that conduct investigations into the impacts of transboundary landscapes on rural livelihoods (Metcalf, 2003; Ramutsindela, 2004; Thakoli, 2006; Mbatha, 2018). This study adds to these studies by simultaneously investigating the impacts of both a national border and a transboundary conservation initiative on the livelihoods of a local rural community.

In addition to understanding the impacts of transboundary landscapes, the perceptions held of these transboundary landscapes are also pertinent to this study. The perceptions held by a community toward initiatives such as nature conservation or structures such as borders reflect the attitudes and opinions they may have toward these initiatives and structures (Moswete *et. al.*, 2011; Queiros & Mearns,

2018). Perceptions and attitudes may differ between communities and conservation or national government institutions when it comes to the impacts of a border, the benefits of conservation or the value of the land and its resources (Queiros & Mearns, 2018). To understand why communities feel or react the way they do to national borders and conservation activities, it is important to understand how they feel they are being impacted by borders and conservation. Through understanding the attitudes and opinions that communities have toward borders and conservation (and their impacts), the communities' perception of the landscape that has resulted from the borders and conservation sites can be captured (Moswete *et. al*., 2011; Chiutsi, & Saarinen, 2017; Queiros & Mearns, 2018). Likewise, the perceptions of the landscape held by the local government and conservation institutions can be captured by looking at what land use and governing strategies they prioritise in the area (Moswete *et. al*., 2011; Queiros & Mearns, 2018). Looking at what the government and conservation institutions deem as the most important to address in a landscape reflects their opinions of what the primary use of the landscape should be and, therefore, what governing and land use strategies to put in place or practice (Moswete *et. al*., 201; Queiros & Mearns, 2018).

The study uses the Mbangweni rural area and Ndumo-Tembe-Futi TFCA case study lens to understand the perceptions held by the community of the transboundary landscape it occupies and shares with the Tembe Elephant Park and Ndumo Game Reserve in Northern KwaZulu-Natal. The governance and management of these conservation sites and the surrounding geographical landscapes impacts the livelihoods of local communities in South Africa and Mozambique with historical and contemporary ties to each other. The perceptions of transboundary landscapes are determined from the ways in which the community and municipal, traditional and conservation governing structures view and govern over transboundary landscapes. These institutions' perceptions and governing methods are interrogated and compared to how local communities view and use transboundary landscapes and how they receive the laws and regulations set by the governing institutions. The determined perceptions of transboundary landscapes and the actual on-the-ground impacts of laws, policies and boundaries, is mapped to highlight the overlapping and contrasting perceptions of key actors and role players in transboundary landscapes.

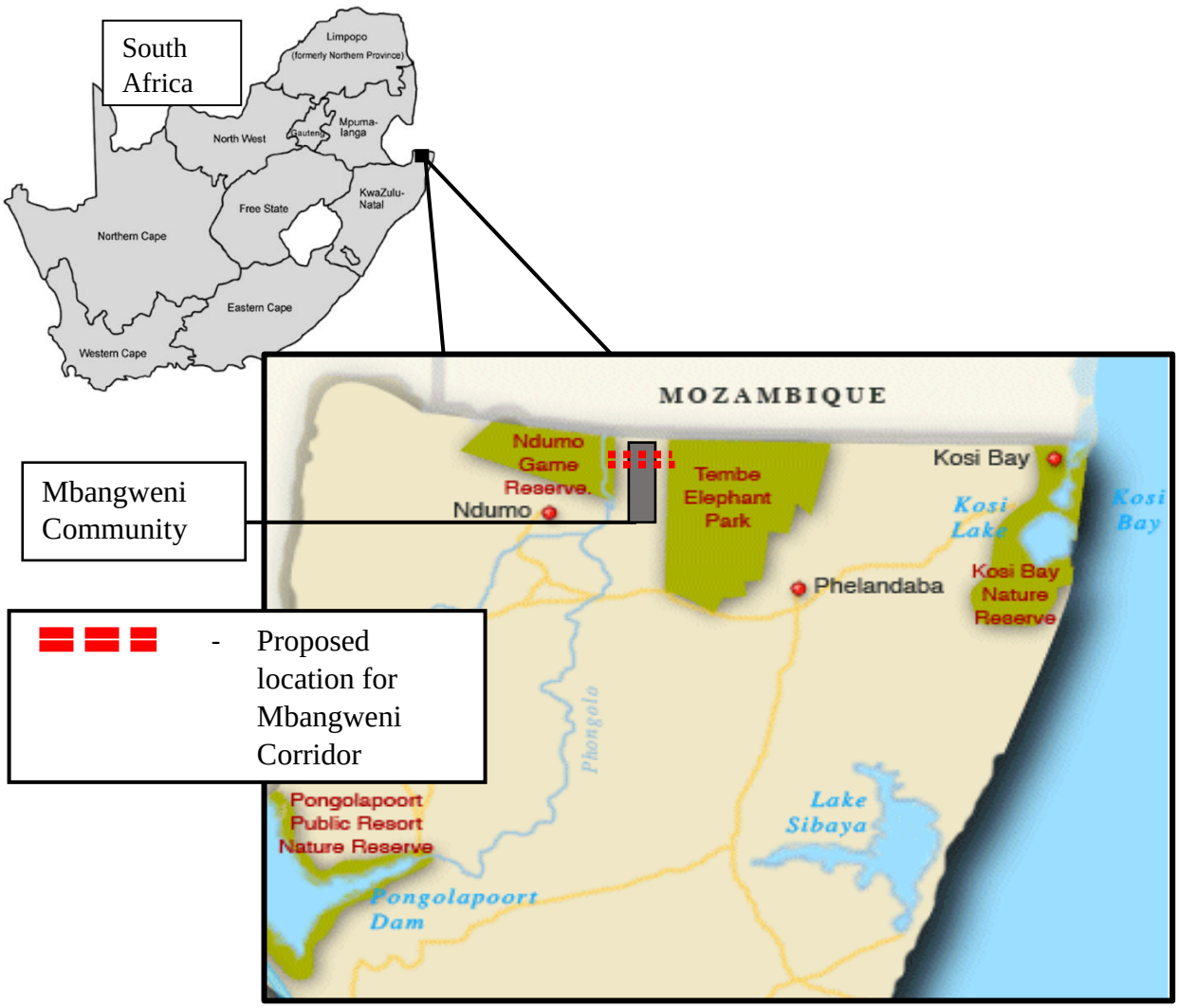
This chapter provides an overview of the community that is used as a case study in this project, the rationale of the study as well as the specific aim and objectives. This chapter also maps out the structure of the dissertation.

1.2 Case study site

The case study site used in this research project was chosen from the northern part of KwaZulu-Natal province. This case study consists of the Mbangweni community located in between the Ndumo Game Reserve and the Tembe Elephant Park. A brief history of this case study is given below.

The Mbangweni community is located within the Ponta do Ouro-Kosi Bay Transfrontier Conservation Area which also forms a part of the Lubombo Transfrontier Conservation Area. In addition to being a part of the Lubombo TFCA, Mbangweni community is located in within the territory of the proposed Ndumo-Tembe-Futi Trans-Frontier Conservation Area (NTF TFCA).

1.2.1 Mbangweni Community, Ndumo Game Reserve and Tembe Elephant Park



Map 1. Location of Ndumo Game Reserve, the Mbangweni corridor and Mbangweni community (http://www.landrovingafrica.com/)

The General Trans-Frontier Conservation and Resource Area Protocol signed between the Governments of the Republic of South Africa, Republic of Mozambique and the Kingdom of Swaziland in mid-June of 2000, resulted in the establishment of the Lubombo Trans-frontier Conservation and Resource Area (Lubombo TFCRA) (Porter et al., 2004). On the same day that the Lubombo TFCRA was formed, a protocol supporting the establishment of the NTF TFCA was signed between the Republics of South Africa and Mozambique reference. The Lubombo TFCRA initiative includes the NTF TFCA between South Africa and Mozambique. The NTF TFCA's proposed location is in the southern part of Mozambique and includes the Maputo Special Reserve in Mozambique (formerly known as Maputo Elephant Reserve), the Tembe Elephant Park in South Africa and the Ndumo Game Reserve also in South Africa. The NTF TFCA project is expected to link the Ndumo Game Reserve to Tembe Elephant Park through a narrow corridor of communally owned land known as the Mbangweni community area that is situated on the South African side of the border (Blok, 2005).

The Mbangweni community falls within the uMkhanyakude District Municipality boundary and occupies land under the authority of the Ingonyama Trust[2] which administers all traditional land affairs on behalf of the respective communities in accordance with the Ingonyama Trust Act (NO. 3KZ OF 1994)[3]. This land is ruled by the Tembe Traditional Authority. Some of the formally protected areas in KwaZulu-Natal– including the Hluhluwe iMfolozi Park, the uKhahlamba Drakensberg Park, Sileza Nature Reserve, etc.– fall under the conservation management authority of Ezemvelo KZN Wildlife (EKZNW) (Blok, 2005).

The Mbangweni community area is located within an economically impoverished region of northern KwaZulu-Natal which has extremely poor agricultural potential resulting in the community depending primarily on limited subsistence farming supplemented by income from family members who work in other parts of the province and the country (Porter et. al., 2004). The conjoining land between the Ndumo Game Reserve and the Tembe Elephant Park, including the Mbangweni community (the proposed Mbangweni Corridor site) has been a political hotbed and a source of confrontation between the community and protected area management in the past. A number of conservation and community development projects had been initiated in the past, however, very little delivery of these projects was achieved, and no tangible benefits were awarded to the relevant stakeholders (Blok, 2005). Moreover, there are currently land claims against some protected areas such as Ndumo Game Reserve in terms of the Restitution of Land Rights Act (Porter et. al., 2004).

[2] The Ingonyama Trust is a body that was established to manage land owned by the government of KwaZulu and is currently responsible for managing approximately 2.8 million hectares of land in KwaZulu-Natal. The land vests in the Ingonyama (or king) as trustee, to be administered on behalf of members of specific communities (Centre for Law and Society, 2015).
[3] The Ingonyama Trust Act (NO. 3KZ OF 1994) was established to provide for the establishment of the Ingonyama Trust and for certain land in KwaZulu-Natal to be held in trust; and to provide for matters incidental thereto. The Act was significantly amended in 1997 to create the KwaZulu-Natal Ingonyama Trust Board to administer the land in accordance with the Act (Centre for Law and Society, 2015; Ingonyama Trust Board, 2004).

Conservation may have impacts on the livelihoods of the Mbangweni community, their access to resources within and across the border as well as their involvement in the Ndumo-Tembe-Futi TFCA processes and outcomes. However, not much is known about the perceptions held by the community about the historical and current uses of this landscape, as well the implications border on their rural livelihoods. Furthermore, the degree and scale to which the governing institutions successfully fit and interplay with each other and with the lived realities of the communities in this transboundary space is not sufficiently explored.

This study site was, therefore, chosen on the premise that it is a part of a transboundary landscape and is under a multitude of conservation, local, provincial and traditional governing structures. This allows the project to investigate the role played by these institutions and the impact of the institutional fit and interplay on rural livelihoods, thus, developing an understanding of the consequences of the transboundary landscape in and around the Tembe Elephant Park, the Ndumo Game reserve on the livelihoods of the Mbangweni community.

1.3 Aim and Objectives

The aim of the study is to enhance understanding about how rural people interact with transboundary landscapes, as well as the perceptions held by rural people and other actors (especially within the conservation sector) about how these landscapes influence rural livelihoods. This is done with the view to assess whether the perceptions and practices of governing institutions in transboundary landscapes fit and interplay with each other, as well as with the lived realities of the communities in these transboundary landscapes.

To achieve this aim, the project employs the following objectives:

- To document the historical and current transboundary livelihood practices of the people of Mbangweni.
- To use the Mbangweni case study as a lens to make sense of the nature of transboundary landscapes, drawing on the perceptions of local people.
- To determine the manner in which government actors and conservation authorities perceive and conceive of the transboundary landscape in the Mbangweni area.
- To determine whether or not (and to what extent) local and government perceptions about the transboundary landscape in Mbangweni are similar, and if not, how that affects livelihood activities on the ground.

- To visually map out the different perceptions of the landscape held by the Mbangweni community and associated governing institutions.

1.4 Rationale

Transboundary landscapes in southern Africa are often occupied by rural communities with historical ties to each other and are also linked by their livelihood activities or by their natural resource needs. The Mbangweni community is a prime example of a rural community occupying a space with transboundary ties to the neighbouring nation of Mozambique through the Ndumo-Tembe-Futi Transfrontier Conservation Area project that seeks to connect the Maputo Special Reserve, the Tembe Elephant Park and the Ndumo Game Reserve and through the historical and contemporary ties between the communities on either side of the Mozambique/South Africa border. Many of the residents of the Mbangweni area moved to South Africa in search of a better economic and livelihood opportunities. The people who occupy the Mbangweni area once lived as a single community with the people in the southern border of Mozambique before the national border was erected in the late 19th century. The establishment of this border separated the single group into multiple groups of separate nationalities (Mozambican and South African) that were forced to stay on either side of the border. Although the local people of Mbangweni occupy and live on one side of the border, they still travel across the border between South Africa and Mozambique as many economic ventures and livelihood opportunities are still shared between the two communities at the border. This setup, therefore, also shapes the space into a transboundary landscape.

Currently, the Mbangweni community sits right at the centre of the Mbangweni corridor's proposed location that is to be used to join the Tembe Elephant Park and the Ndumo Game Reserve in fulfilment of the NTF TFCA. The proposal made for joining these nature reserves in fulfilment of the NTF TFCA has been met with much resistance and contestation from the local Mbangweni community. The perceptions held by the local, district, national and conservation institutions governing transboundary landscapes are communicated the most through the laws and regulations imposed on the livelihoods of the local community. This can be observed in the laws set for the establishment of the Ndumo-Tembe-Futi TFCA. These laws and plans for the TFCA reflect that the institutions and actors governing over the transboundary landscape potentially see the landscape as one that serves the primary purpose of nature conservation. In contrast to this, not much of the community's perspective is communicated or considered when initiating transboundary projects such as the NTF TFCA. This is evident in the fact that the Mbangweni community did not take part in the signing of the 2002 General Trans-frontier Conservation and Resource Area Protocol set to establish the NTF TFCA. These projects often have potentially negative implications for the livelihoods of the local communities whose opinions and

perspectives are often not considered and communicated at the initial stages of the projects' establishment (Blok, 2005; Porter et. al., 2004; Noe, 2010).

The Mbangweni community is exposed to transboundary conservation governance through the projected linkage of the Maputo Elephant Reserve, the Tembe Elephant Park and the Ndumo Game Reserve. The establishment of the Lubombo Transfrontier Conservation and Resource Area (LTFCRA) allowed for plans to be made for the establishment of the NTF TFCA (Ezemvelo KZN Wildlife, 2018). The linkage of the Ndumo Game Reserve to the Tembe Elephant Park to form the NTF TFCA would require a part of the land between the two nature reserves to be fenced off from the nearby Mbangweni community to form a corridor that would link the nature reserves to each other (Marshall, 2008; Ezemvelo KZN Wildlife, 2018). However, it is not clear how the establishment and existence of the Lubombo Transfrontier Conservation and Resource Area, of which the Ndumo-Tembe-Futi TFCA is a part, as well as the existence of the nature reserves near Mbangweni affect the community as well as the community's ability to make use of the land and natural resources on either side of the South Africa/Mozambique border. This research project, therefore, presents and explores the transboundary conservation governance experiences of the Mbangweni Community as it exists within the landscape also occupied by the TFCAs and nature reserves.

This project also adds to the existing literature on transboundary landscapes and their consequences by exploring, mapping, visually representing and communicating the perceptions held not only by the governing structures through the laws they enforce but also, mostly, by the local rural community adjacent to the national South Africa/Mozambique border and transboundary nature conservation spaces. These perceptions are compared to those of the governing actors and to the laws and regulations set by these actors. This is done to investigate where these perceptions or lived experiences coincide with governance strategies and where they diverge from them. In the case of diverging views and laws, consideration is given to the possibility of modifying boundary and institutional laws to accommodate the perceptions and, mostly, the lived realities of rural communities in transboundary landscapes.

1.5 Structure of dissertation

Chapter One introduced the study and the aims and objectives of the research project and has provided a brief background and context of the case study site. Chapter Two presents a literature review of the literature used to inform this study. Chapter Three describes the methods that have been used to collect and analyse the data. Chapter Four provides the first part of the findings in the form of the background context for this study which includes an overview of the history and background of the Mbangweni community near the Tembe Elephant Parka and the Ndumo Game Reserve, the context of other governing institutions, borders and transboundary landscapes in South Africa, transboundary nature

conservation in South Africa as well as the context of the Ndumo Game Reserve, the Tembe Elephant Park and their conflict with the Mbangweni community. Chapter Five presents and describes the second part of the findings of this research. The findings are then analysed and discussed in Chapter Six. Chapter Seven concludes the research project and gives recommendations for future projects and research best practice.

Chapter 2: Literature Review

2.1 Introduction

This chapter provides a review of the literature and theories on transboundary landscapes and the impacts they may or may not have on rural livelihoods. To inform and support this study, this research project engages with a body of literature which unpacks what constitutes rural livelihoods and the characteristics of rural areas that contribute to our understanding of rural livelihoods. Furthermore, sources and scholars such as the World Bank (1996), Jones (2006), Shongwe (2006) and Ramutsindela (2004, 2014) conceptualise transboundary conservation as large areas of natural resource conservation or protected areas that occur at boundaries that stand between two or more countries. This conceptualisation has the capability to enhance our understanding of what conservation contributes to rural livelihoods and the role that transboundary conservation plays in rural livelihoods. The governance of transboundary landscapes and their associated constructed boundaries have variable consequences for livelihoods of local communities. The establishment of borders separating countries was initiated by colonial governments who, in Africa, established both geographic and political boundaries (Mayoral-Phillips, 2002). Consequently, these borders and boundaries have created separate states and have separated and isolated population groups that once lived as a single group (Thakholi, 2016). Nature conservation sites have boundaries and borders that make it difficult for people living nearby to gain access into them and make use of the natural resources occurring in those conservation sites (Thakholi, 2016).

Ramutsindela (2014) suggests that paying attention to the various contexts in which borders are developed can add a deeper understanding of borders and boundaries beyond the assumptions that the formation of borders and boundaries has very much to do with a state/country and its behaviour. For instance, state borders may be used to promote transborder conservation projects in the form of transboundary nature conservation (Sinthumule & Ramutsindela, 2014). On the other hand, borders are also viewed as strictly political structures as opposed to structures that serve an ecological preservation purpose and are, therefore, viewed as being out of line with ecological systems (Hanks, 2003; Munthali, 2007; Sinthumule & Ramutsindela, 2014). It can, however, be argued that nature conservation provides an avenue for understanding the ways in which multiple borders are (re) constituted at a single location and site and how this would be a process that unfolds in various nature conservation efforts and projects ref. This means that borders can be redefined and restructured to suite political and/or conservation agendas. Borders of states and those within societal groups are often the products of various processes occurring within the state or societal groups, some of which are not based on border establishments or do not have the formation of borders as their principal objective (Ramutsindela, 2014). These borders may also be products of processes occurring between states for other political, economic and social purposes.

This chapter looks at how national borders and nature conservation occurring at these borders may have a major impact on rural livelihoods.

2.2 History and Context of Borders & Transboundary Landscapes in South Africa

Borders can be identified as a social phenomenon that has been constructed and reconstructed in the context of globalization (Wyllie, 2014). It is, therefore, important for this study to identify the different meanings and definitions of borders to highlight the variability of this global concept that is relevant in the present-day Maputaland.

Border studies scholars such as Hageman (2004) have defined borders as being:

> …constructed as institutions that serve to mark functioning barriers between states, to impose control over-flows of people and regulation of cross-border trade, or to indicate the evolving gateway to contact and interchange.

Other prominent border studies scholars, including Timothy (2006) have defined a border to be:

> A place where political entities collide, economies converge, and cultures tend to mix and is, therefore, considered to be one of the best concepts in terms of its contribution to the study of the globalization process.

The Oxford English Dictionary gives a definition of a border as:

> A line separating two countries, administrative divisions and/or other areas.

These definitions are all relevant and applicable to this study as the national border separating South Africa and Mozambique was initially established as an administrative division mechanism that would separate colonial states. Furthermore, this border marks a barrier between the two states and works to control the flows of people and trading of goods between the two countries. Political entities and economies converge and collide at this border in the form of traditional and national government as well as informal trading and livelihood activities. The cultures of the Zulu people of South Africa and the Tonga people from Mozambique mix at this border. These groups of people once lived as a single community and continue to infiltrate this porous border for the sake of maintaining their kinship ties across both sides of the border.

The Portuguese, who had settled in Mozambique, put up stone cairns to mark the border. In the 1940s the South African authorities started the construction of a border fence. People in the Maputaland region moved freely across the border before 1975 to visit relatives and friends, as it was easy to move from one side of the border to the other. Despite the existence of the fence, the authorities allowed local people, whom they knew, to move relatively freely across the border. Minimal policing occurred at the border. This made crossings of the border extremely easy for the those who resided nearby. In

1975 the apartheid regime in South Africa then put up a lethal electric fence along the border with Mozambique. After the end of the apartheid regime, much of the fence was removed (Kloppers, 2004).

In 1978 when South Africa abandoned the principles of non-intervention in its dealings with Angola and Mozambique, South Africa supported a rebellion against the regime in Mozambique and used Mozambique as a corridor for infiltrating South Africa. Cross-border movement was then restricted by both the South African and Mozambique governments and landmines were laid by Mozambique at the border. Further attempts to block access were made when sisal plants were planted all along the boundary fence to prevent people from crossing. This is a technique used by local people throughout Maputaland. Sisal planted in close proximity to each other created an impenetrable wall. However, because elephants, roaming freely in the area, kept breaking through the sisal wall, the plan never succeeded. The fence remained as a mere three-strand, three-foot high wire construction. However, the increase in soldiers along the border made it difficult for local people to cross over it (Kloppers, 2004).

Relationships formed by shared spaces between neighbouring countries involve multiple stakeholders, including advocates, businesses, and governments. Diverse cases of transboundary issues cover different types of shared spaces in different regions of the world. Some of these cases highlight the importance of a shared issue and how it could be an opportunity for neighbouring communities/countries with strained relationships to cooperate for domestic purposes. Others focus on the mechanisms for building regional partnerships to address transboundary challenges. Nevertheless, diverse stakeholders in these countries/regions must effectively work together—to manage their shared natural resources, develop their shared spaces for economic or health services, or strengthen national security against environmental challenges (Turekian & Wang, 2018).

In South Africa, transboundary landscapes are created by the existence of communities with historical ties to each other on either side of the border. This holds true for the communities of Maputaland. Conservation also historically played and continues to play a large role in the creation of transboundary landscapes. Through connecting nature reserves in different countries, across national borders, nature conservation creates opportunities for the existence of transboundary landscapes (Wyllie, 2014). In the present day Maputaland, historical ties between the communities in Mozambique and South Africa still exist in contemporary livelihood facilitation. Rural communities such as Mbangweni still conduct livelihood activities across the national border and still cross the informal South Africa/Mozambique border to visit friends and family members in Mozambique. A transboundary landscape is, thus, created and perpetuated by this cross-border activity. Moreover, transboundary nature conservation persists in this area for the purpose of linking nature reserves in South Africa to other reserves in the

surrounding countries (Mozambique, Zimbabwe, Lesotho, Swaziland) in order to facilitate large-scale natural resource management (Wyllie, 2014).

2.3 Context of Transboundary Nature Conservation in South Africa

There are various concepts and corresponding terms to describe different transboundary frameworks, including the larger Transboundary Natural Resource Management (TBNRM) paradigm, Transboundary Protected Areas (TBPA), Transboundary Conservation Areas (TBCA), Transfrontier Conservation Areas (TFCA) and Transboundary Development Areas (TBDA) (Mayoral-Phillips, 2002; Jones, 2006). The term transboundary can be shaped to become and mean different things to all people. The various terms may have different peripheral foci, but all include the sustainable use of natural resources. Strong theoretical debates on transboundary issues have developed, however, consensus about potential benefits and/or detrimental effects has yet to emerge. TBNRM activities can legalize cross-border movement and renew cultural ties affected by (inter)national borders and can be described as conservation expansionism. It is also believed that transboundary initiatives can foster peace and security provide environmental security and enhance regional cooperation, and mend pre- and post-colonial conflicts in Southern Africa (Jones, 2006). It may also be argued that they may cause inter-state disputes rather than solve them or increase conflict if land disputes and economic benefits are not equitably shared among participating countries (Fakir, 2000; Wolmer, 2003; Jones, 2006). Increased economic development and poverty alleviation for poor rural communities are highly anticipated from new nature-based tourism opportunities. Despite the dichotomies, the transboundary conservation movement has gained momentum in Southern Africa (Jones, 2006).

Current conservation practices in the developing world are conceptualized as biodiversity-protection and rural economic development providing tools. Conservation's responsibility or ability to contribute to poverty alleviation and maintain its primary function of biodiversity protection is widely debated (Jones, 2006; Sinthumule & Ramutsindela, 2014; Meer & Schnurr, 2013; Thakholi, 2016). Whether conservation is prioritised over poverty or vice versa, human well-being at the global scale and local livelihoods at the micro scale are dependent on natural resources. This makes it impossible to separate environment and development issues. In South Africa, conservation has largely been pursued in protected areas, particularly fenced parks devoid of human settlement. The benefits of these fenced parks are well known (i.e. biodiversity and ecosystem services), however, the impacts on local livelihoods are not well documented or acknowledged. The Maputaland region contains exceptional biodiversity alongside massive poverty and has been the subject of conservation and development projects branded as simultaneous conservation and development solutions. However, conservation in Maputaland is driven by global external agendas and epistemologies based on abstract misconceptions of rural land use patterns and livelihoods, while the costs of implementation fall on the locals. Economic

development is supposedly facilitated through nature-based tourism, participatory community schemes, and pro-poor polices but the benefits have been minimal and slow to materialize. Uneven levels of power between rural residents and external institutions, as well as within the local tribal government, have resulted in the inequitable distribution of benefits and decision-making power. Development strategies in Maputaland continues to focus on conservation, including the expansion of protected areas to form transboundary peace parks linking reserves in South Africa, Mozambique, and Swaziland. However, major losses could be experienced in the form of household resettlement, lost access to socio-cultural and natural resources, and an increased risk of conflict over land use between conservation authorities and local residents (Jones, 2006; Ramutsindela, 2014; Sinthumule & Ramutsindela, 2014). This is a common narrative around South African, especially KwaZulu-Natal where a few TFCAs have been proposed and established for the betterment of nature conservation and rural community development. One such a TFCA is the Lubombo Transfrontier Conservation and Resource Area. In 2000, the governments of Mozambique, South Africa and Swaziland signed a protocol on the establishment of this TFCA which later (in 2014) resulted in the Lubombo Commission merging the Lubombo Conservancy-Goba Transfrontier Conservation Area (TFCA) with the Usuthu-Tembe-Futi TFCA (Swaziland / South Africa / Mozambique). This merge linked the Lebombo Mountain Ecosystem with the coastal plains. This decision, based on landscape-planning and ecosystems considerations, was established to streamline institutional arrangements and benefit the communities in Swaziland (The Department of Environmental Affairs, 2016).

Commonly known as the Lubombo Transfrontier Conservation Area (LTFCA), it spans an area of approximately 10,000 km^2 and borders Swaziland, Mozambique and South Africa. It lies in an area that includes five Ramsar sites: Ndumo Game Reserve, Kosi Bay, Lake Sibaya, the Turtle Beaches and Coral Reefs of Tongaland as well as Lake St. Lucia. The greater LTFCA holds the first marine TFCA in Africa– Ponta do Ouro-Kosi Bay TFCA– linking Mozambique's Ponta do Ouro Partial Marine Reserve turtle monitoring programme with the one across the border in South Africa's iSimangaliso Wetland Park. The primary objective of LTFCA is to create an enabling framework to facilitate economic development through appropriate optimisation of opportunities presented by the countries' natural assets, ecological and financial sustainable development, and the sustainable utilisation of the natural resource base through holistic and integrated environmental planning, management and implementation methods (The Department of Environmental Affairs, 2016). The rural communities in the region rely on the area for important subsistence natural resources including fish, honey, building materials, wild food plants, medicinal plants and game. Small areas within the region are cultivated. Programmes within the LTFCA are aimed at strengthening benefits through sustainable harvesting and practices (The Department of Environmental Affairs, 2016).

One of the Lubombo Transfrontier Conservation and Resource Area's most important developments was the approval of the declaration of the Futi Corridor as a protected area in 2011. This corridor stretches from Maputo Special Reserve in Mozambique to Tembe National Park in South Africa and is now an integral part of the Maputo Special Reserve. One of the main reasons for establishing the Lubombo TFCA has always been to reunite the last naturally occurring coastal elephant population in Southern Africa as it historically moved freely along the Futi River and Rio Maputo floodplains. Today– with the establishment of the Futi Corridor as a protected area– reuniting the elephant population, creating a tourism product and benefitting communities are identified as the main objectives of this initiative. The aim was to remove the electrified South Africa/Mozambique border fence to allow the elephant and other wildlife to re-establish their ancient migration patterns. Conservation areas along the Futi River were predicted to enable communities to become shareholders in conservation and eco-tourism businesses, creating a viable land use option in the region (Peace Parks Foundation, 2011).

Another example of a TFCA established for simultaneous nature conservation and community development is the Usuthu-Tembe-Futi TFCA. This sub-TFCA of the Lubombo TFCA links the Usuthu Gorge, Tembe Elephant Park and the Maputo Special reserves (Peace Parks Foundation, 2011)

2.4 Rural livelihood perspectives

To understand the impact of conservation governance on rural livelihoods, it is important to try and understand what constitutes rural livelihoods. Rural livelihoods are, therefore, described by the presence of social and migratory networks and activities such as: rural-urban migration, livestock farming (including production, processing and retail), informal economic strategies (small scale retail of basic goods), crop farming, remittances from urban family members who are also involved in formal and informal as well as paid and self-employed activities in the urban areas, land-based agrarian activities, state cash transfers in the form of child and pension grants as well as cultural behaviours, knowledges and mutually beneficial practices found in rural areas (Neves & Du Toit, 2013). Rural livelihoods are complex and, to some extent, vulnerable to changes and major shocks or stresses. Patterns of social differentiation may be present and may be an additional factor used to describe and classify rural livelihoods. The complexity and contingent nature of the livelihoods often reveals hierarchical structures and social differentiation patterns which may have been established subconsciously and may form a part of rural communities' survival strategies (Neves & Du Toit, 2013). Social networks formed within communities are not evenly distributed across space and, therefore, differential patterns within households, communities and regions may exist (King, 2011).

Conceptualising the term 'livelihoods' can be done by relating it to fields of development enquiry and practice. These relate to locales (rural or urban livelihoods), occupations (farming, pastoral or fishing livelihoods), social difference (gendered, age-defined livelihoods), directions (livelihood pathways,

trajectories), dynamic patterns (sustainable or resilient livelihoods) and many more. Understanding the livelihoods perspectives, at the global and local scales, starts with understanding how different people in different places live. A variety of definitions are offered for this concept in the literature, including, for example, "the means of gaining a living" (Chambers 1995: 174) or "a combination of the resources used, and the activities undertaken in order to live" (Livelihoods.org, 2017). A descriptive analysis of this concept reflects a complex web of activities and interactions that emphasises the diversity of ways people make a living. This may cut across the boundaries of more conventional approaches to looking at rural development which focus on defined activities: agriculture, wage employment, farm labour, small-scale enterprise and so on. The reality of the livelihoods concept is that people combine different activities in a complex portfolio of activities. Outcomes of these combinations vary, and how different strategies affect livelihood pathways or trajectories is an important concern for livelihoods analysis. This dynamic, longitudinal analysis emphasises such terms as coping, adaptation, improvement, diversification and transformation (Scoones 2009; 2015). Livelihoods analyses at the individual level can in turn result in complex livelihood strategies and pathways at household, village or even district levels. Belonging to no discipline in particular, livelihoods perspectives and approaches can allow a bridging of divides, allowing different people to work together – particularly across the natural and social sciences (Scoones 2009; 2015).

The Sustainable Livelihoods Framework (SLF) further provides a means of representing ways in which livelihoods are attained and sustained through access to and the use of various livelihood resources. This framework makes reference to resources that may be natural, economic, human and social. Scoones (1998) notes that the Sustainable Rural Livelihoods Framework is an important tool for trying to understand rural livelihoods as it contains a number of elements that can be combined and used differently in order to support basic sustainable livelihoods and strategies as well as to analyze the outcomes of these livelihood strategies. Furthermore, the framework can be used at various social scales ranging "from individual to household to household cluster, to extended kin grouping, to village, region or even nation" (Scoones, 1998: 5). Procuring the necessary data to represent livelihoods and sustainable livelihoods is a part of the Livelihoods Approach using the Sustainable Livelihoods Framework. This approach combines the context of the community (demographics, capabilities, networks etc.) and the community's means of creating a living (livelihood resources) in order to formulate the livelihood strategies employed in particular community contexts to assist in their living and interactions. The Sustainable Livelihoods Approach (SLA) has, therefore, provided a means of looking at and analysing the ways in which people in rural communities, such as Mbangweni, make a living and learn to survive to move away from states of poverty (Alison & Ellis, 2001; Allison & Horemans, 2006). Using this framework, this research project can analyse and understand the way in which the people of Mbangweni create their livelihoods in the transboundary landscape and, therefore, how the adjacent conservation activities and the associated governing structures impact the livelihoods

of this rural community. The SLA is, therefore, useful for guiding how this research project enhances the understanding of the impact of a transboundary landscape dominated by conservation on the rural livelihoods of the Mbangweni community. The kinds of livelihood resources and activities employed by the Mbangweni community can be used to understand how they occupy the landscape and, therefore, how it is that the adjacent conservation hinders or enhances the community's livelihoods

Moreover, over the last decade or so the term 'livelihoods' has emerged globally as a boundary term and a concept of something that brings disparate perspectives together, allows conversations over disciplinary and professional divides and provides an institutional bridging function linking people, professions and practices in new ways. Several approaches have such as household economics and gender analyses, studies of socio-environmental change, political ecology, sustainability science and resilience studies have contributed to the conceptualisation of rural livelihoods perspective. These approaches have offered diverse insights into the way complex, rural livelihoods intersect with political, economic and environmental processes from a wide range of disciplinary perspectives, drawing from both the natural and social sciences. Each has different emphases and focuses on different disciplines, and each has engaged in rural development policy and practice in different ways, with varying degrees of influence (Clarke and Carney, 2008; Scoones, 2009; Scoones, 2015).

South Africa's history of racial discrimination during the apartheid regime resulted in the majority of the population being marginalised outside of the mainstream economy and favourable spatial legacies (Partridge et. al., 2018). Present-day rural livelihoods in South Africa are therefore, marked by lingering racialized and spatial legacies of poverty (Neves & Du Toit, 2013). A further observation made by Neves & Du Toit (2013) suggests that rural livelihoods in South Africa can be described and differentiated by the nature of the diverse activities that take place within the areas as well as by the interactions these rural areas may have with nearby urban areas. The way in which communities, households or individuals in rural areas interact with and use their land, employment opportunities and livelihood strategies characterise the rural livelihoods in a particular rural area (Scoones, 1998; Scoones 2015; Neves & Du Toit, 2013). The livelihoods of South Africa's rural African poor have long been characterized by diverse activities and intertwined with opportunities offered urban by spaces. Furthermore, contemporary rural livelihoods are not only found in migratory networks and diverse livelihood activities, however, they are considered to be grounded in terms of four broad domains. The first of these is that they are forged within various land-based and agrarian activities. The second domain is that they are often supported by small-scale, informal economic activities, both farm and non-farm. The third is that they are frequently shaped by South Africa's comparatively well-developed system of state cash transfers. The fourth and final is how they are patterned by culturally inscribed patterns of mutuality and social reciprocity (Neves & Du Toit, 2012).

2.5 Role of Conservation in Rural Livelihoods

Large-scale conservation efforts in parts of South Africa tend to occur in or near rural areas. Examples of these conservation efforts include iSimangaliso Wetland Park near the rural villages of Kosi Bay in northern KZN (Mbatha, 2018), the Dwesa-Cwebe Marine Protected Area in the Eastern Cape (Sunde & Sowman, 2018) and the Mkambati Nature Reserve near the Xolobeni and Mkambati rural areas in the Eastern Cape (Kepe, 2008). The issue of having nature conservation existing in or sharing a space with rural livelihoods comes when fortress conservation is developed and perpetuated in this space. Fortress conservation is an ideal that is backed by the concept that nature and people should be separated, either because people and their livelihoods are too dangerous to be allowed to be part of the landscape, and/or because the idealized perfect landscape is simply conceived to be 'wilderness' i.e. a place without people. Fortress conservation is a term also associated with imposition and injustice, (Brockington et. al., 2008; Brockington Brockington, 2015). Fortress conservation is a practice of separating the nature and natural resources form humans and their livelihood needs and activities. Fortress conservation promotes exclusion as it restricts access to nature in the name of preserving and protecting that nature. The practice of fortress conservation requires force when implementing and is often unwelcomed by the people who were accustomed to using the resources and landscapes now blocked off to them by hard borders and boundaries. Brockington (2015: 2) describes fortress conservation as "the physical, sometimes violent, creation of these landscapes. It is the purifying force and policy necessary to create people-less lands deemed to be the natural, proper state of nature". Moreover, Brockington also notes that fortress conservation is not only manifested in the developed world, but it is a global issue that also "enjoys popular and substantial support in many governments worldwide" (Brockington, 2015: 2).

The inconvenience of fortress conservation in the global south comes as it imagines nature and natural resources as naturally free of humans instead of recognizing that humans are also a part of nature and that indigenous communities apply efforts to protect and preserve their natural surroundings, natural resources and, thus, their livelihoods. Fortress conservation is perpetuated under the belief that creating protected areas where ecosystems function without human interference is the best way to protect the natural resources and ecosystems (Brockington, 2015; Rainforest.org, 2009). Moreover, this kind of rigid conservation blames indigenous communities for exploiting and using natural resources in these environmentally significant areas. The blame is shifted onto these communities instead of recognising the benefits that indigenous communities provide in ensuring the preservation of the biodiversity and ecosystems the conservationists are trying to protect (Rainforest.org, 2009). The exclusion of indigenous and local communities from participating in conservation efforts removes the opportunities of livelihood creation from these communities. This has particularly heavy consequences for rural communities in the global south whose means of livelihood creation are largely based on natural resource use (Brockington, 2008; 2015).

The fortress conservation model also harshly infringes on the human rights of rural communities whose livelihoods are sought to be excluded and separated from the nature conservation sites. Rural communities in the global south with strong historical ties to the land they occupy are at risk of being separated and excluded from their ancestral lands. The forced removal of people from their homes and community spaces for the sake of conservation leaves communities without homes, access to basic services that serve their basic needs and without means of living (Rainforest.org, 2009).

The co-existence of rural communities and conservation efforts may be positive or may have negative outcomes depending on how the communities receive and adapt to nature conservation. The existence of nature conservation often leads to the restriction of access to natural resources in the efforts to protect and conserve these natural resources. This restriction may have no impact on the local rural communities and their livelihood activities. Alternatively, the restrictions may not be well received by the local communities as they may be prohibited from accessing natural resources essential for their livelihoods. This type of negative co-existence may affect mostly the community members as they may have to change their livelihood strategies, or they may be forced to disregard the laws set out by conservation governance in a desperate attempt to maintain their livelihoods. This outcome may be amplified and intensified where several nature reserves or conservation areas are joined as one across borders and become trans-frontier or transboundary conservation areas.

Political ecology plays an important role in the negative co-existence of rural livelihoods. This concept of political ecology defines and describes a landscape or space in which different social actors with asymmetrical political power compete for access to and control over natural resources and spaces (Vaccaro et. al., 2013; Bryant and Bailey 1997). Political ecology emphasizes how the connections between ecology/the environment and social context/communities are created by matching and weighing ecological and social situations, thus, contributing to the understanding of their interactions and the social production of landscapes (Vaccaro et. al., 2013). Developing and implementing a conservation policy is an example of such interactions and the policy development and implementation illustrates the competition for environmental control as "protected areas, by definition, establish jurisdictions and borders that define exclusionary rights" (Vaccaro et. al., 2013: 255). This results in the conservation efforts infringing upon the social context and needs of the communities existing near the protected areas. These policies are implemented by different social and institutional actors whilst being suffered by other social groups further illustrating how these political and social actors, therefore, remain engaged in an assemblage of contradictory social relationships. Massé (2016: 100) eludes to the concept of "conservation-induced displacement" which is born from the co-existence between communities and protected areas in a single landscape. From the creation of conservation sites of wilderness conservation landscapes, a degree of displacement is created and a sense of belonging is lost

by the communities (Massé, 2016). The political decisions taken to create a certain type of conservation landscape often have negative impacts on the livelihoods of the communities near the conservation sites. Fortress conservation and transboundary conservation, therefore, become examples of the results of these often uninformed and non-consultive political decisions that work to prioritise conservation whilst not considering the risk of undermining the livelihoods of the communities nearby through forced displacement and restricted access to resources (Massé, 2016; Brockington, 2015; Rainforest.org, 2009).

The World Bank (1996) defines a Transboundary Conservation Area (TBCA) as a "relatively large areas that straddle frontiers (boundaries) between two or more countries and cover large-scale natural systems encompassing one or more protected areas." Sinthumule (2016) and Ramutsindela (2007, 2014) adopt this definition and describe Transboundary or Transfrontier Conservation Areas (TCA/TFCA) as alternative approaches to nature conservation that occur at the political boundaries between two or more countries and cover natural ecosystems that include one or more protected areas Sinthumule (2016). Defining of TBCA's has become complex and interchangeable with more aspects of transboundary landscapes and boundaries being considered (Mayoral-Phillips, 2002; Ramutsindela 2007). Geographical entities and management regimes have also been identified as variables in defining a TBCA. The recent worldwide boom of transboundary protected areas (TPAs) highlights an enthusiasm of a movement of developments in environmental conservation (Besancon and Savy 2005). Although the need for transnational biodiversity conservation provides a platform for transboundary conservation areas, the explosion of interest in transboundary conservation comes with promised benefits in other socio-economic realms (Scovronick, 2006). Transboundary conservation holds the potential for reconciling regional socioeconomic and political realities with environmental preservation. Furthermore, TPAs are cited with a range of objectives beyond environmental protection including economic gain, social harmony and the promotion of peace (e.g. de Villiers 1999; Hanks 2003; Mittermeier et al. 2005). Ramutsindela (2004), notes that the socioeconomic context of Southern Africa epitomizes suitable and fertile ground for TPAs because of its combination of threats facing wilderness areas, ecotourism opportunities, and recent political and social change (through the Apartheid era liberations (Ramutsindela, 2004; Scovronick, 2006).

Transboundary conservation parks, protected and conserved areas or natural resource management initiatives have a range of objectives, including: the conservation of biodiversity, ecosystem services, natural and cultural values across boundaries; promoting landscape-level ecosystem management; peace building and laying the foundations for collaboration (trust, reconciliation and cooperation) between conservation institutions and surrounding communities; increasing the benefits of conservation to communities on both sides of the borders as well as economic development (largely through tourism) to local and national economies (Metcalfe, 2003; Sinthumule, 2016). However, the growing advocacy for Transboundary conservation areas is met with the growing criticism of these transboundary

conservation efforts (IUCN 2002, Munthali & Metcalfe 2002, Wolmer 2003; Ramutsindela, 2007; Ramutsindela 2014). A policy and programmatic struggle has ensued between the conservation and social justice concerns as well as over top-down versus bottom-up approaches as opposing perceptions of constructed landscapes and boundaries have and continue to cause much conflict. The politically driven top-down model receives criticism from a rural development perspective (Metcalfe, 2003; Ramutsindela, 2007).

Community land and natural resource rights paved the way for conservation management collaborations with rights administered by communities, local authorities and the state. The alienation of local rights to the new centralized nation states was brought on by the designation of land to protected areas, especially for wildlife and forest reserves. In addition, national boundaries fragmented the cultural and social integrity of many communities and separated communities from their livelihood resources (West & Brechin 1991; Brockington, 2015). Protected area authorities see the need to collaborate with the surrounding alienated communities. The 1980's and 1990's witnessed a new narrative in the conservation discourse. This narrative translated to a strong advocacy for the devolution of natural resource management rights to communities living near protected areas. Great efforts were made in the 1990's to promote, implement and sustain community-based conservation strategies in a regional context through positive collaboration between protected areas and neighbouring communities. The evolution of community-based conservation southern Africa in the 1990's set the stage for co-management of wild land between households, communities, the state and the private sector (e.g. Campfire in Zimbabwe; Conservancies in Namibia; NRM Trusts in Botswana). Communities adjacent to nature conservation areas were seen to be empowered by access to wildlife resources and benefits. Some of these communities were positioned to enter partnerships with protected area authorities and the private sector and collaborate in landscape-level conservation which presented a potential foundation for collaboration between countries (Metcalfe 1995; Nkambule et. al., 2016). With South Africa being characterised by high levels of biodiversity alongside vulnerable socio-economic settings, it is important to develop conservation practices that provide both environmental and social benefits. Community-based conservation practices, therefore, provided the opportunities for achieving environmental conservation objectives whilst promoting local-level socio-economic development (Nkambule et. al., 2016).

Linked to the promotion of community empowerment outside of protected areas, a recent debate on the necessity for state ownership, rather than a co-management or community management of the nature conservation parks themselves has ensued (Brown & Kothari 2002). Generally, post-colonial states in Africa have been inclined to maintain state management and often to see co-management as a state partnership with the private sector rather than with communities. This has equity implications as a public/community sector co-management arrangement would create a more equitable foundation for

sustainable development and should ideally precede a collaborative partnership between state, community and the private sector.

Although southern Africa has been a leader in community-based natural resources management (CBNRM), communities have generally struggled to secure and manage fully devolved resource use rights (e.g. Tanzania, Mozambique, Zambia, Zimbabwe) (Metcalfe 1994, 1996; Ramutsindela 2014). Devolution has varied greatly and only in few cases amounted to more than a sharing of some benefits rather than real responsibility (e.g. Botswana, Namibia). Communities have also faced management problems related to lack of relevant knowledge, administration, accountability, transparency, reporting and monitoring of both ecological and socio-economic impact (Metcalfe, 2003; Ramutsindela 2014).

Despite the widespread excitement and support for transboundary conservation, practical and conceptual challenges still exist with transboundary conservation efforts. In practice, the potential for transboundary conservation areas' reliability for community development is minimal and unreliable. The location and specific contexts of each conservation boundary and border differs for different areas and could potentially play different roles in different rural community livelihood (Schoon, 2013; Barquet *et. al*., 2014). This highlights the downfall of a single transboundary conservation method being used as a blanket method for different parts of a country, i.e. coastal and inland areas suitable for conservation. The conceptual potential for community development through conservation, therefore, becomes unreliable and may decrease the support it receives from nearby communities. The fear of transboundary conservation areas being used as tools to gain control over certain parts of an area or country may also deter communities from part-taking and supporting conservation efforts near their livelihood spaces (Barquet *et. al*., 2014). Complexities that further add to the unreliability of transboundary conservation include the unaccommodating interests of government actors and the commercial interests and values that guide the formation of transboundary conservation as opposed to ecological safeguarding being prioritised when forming these transboundary landscapes (Barquet, 2015).

Government and other authoritative actors tend to take a supervisory role as opposed to establishing supportive partnerships with conservation institutions and local communities. Communities have a strong claim to ownership, and both use and benefit from the natural resources in the areas they reside. This, however, does not mean they can automatically manage the resources efficiently, equitably or sustainably (ecologically, economically or institutionally). Communities need assistance, facilitation and training, as well as supervision when it comes to managing and sustaining nearby conservation parks. Communities should be seen as public-sector clients to whom the government assures service support to enable them to emerge as genuine resource managers and mutual landscape level partners (Metcalfe, 2003; Schoon, 2013).

Collaborative partnerships between landholders and private investors are central to managing landscapes and conservation areas economically. If power relationships between landholders (community, public, private sectors) are skewed then the collaboration can become characterized by patronage and co-option by the public and private sectors and a reactive type of participation by communities. The uncertainty of community development and benefit sharing from transboundary conservation efforts makes community members anxious about their livelihoods and how they will be impacted by protected conservation areas.

Having gained some authority through resource devolution through CBNRM policies and programs there is a sense that urban, private and public-sector elites may collude at the expense of communities living on the national periphery. The wellbeing and food security of local rural communities may be threatened should the CBNRM policies not be implemented properly (Metcalfe 1999; Metcalf, 2003; Khumalo & Yung, 2015). National borders and conservation boundaries remain 'hard edges' and although communities might support the opening up of borderland areas if it improved their livelihood options, national governments appear more prepared to legitimate higher levels of coordination than the lower ones that involve community-based management and cooperation with local communities. The potential for transboundary conservation in Southern Africa will only be truly realized when state/community partnerships are in place. Some Non-Government Organizations (NGOs) that had spent the last decade supporting community conservation initiatives are now again supporting "voiceless" TBPA communities (IUCN, 2002; Barquet, 2015). There are several TBPA initiatives in southern Africa involving protected and community land, park authorities, rural communities and to lesser extent private landholders (Metcalf, 2003; Schoon, 2013).

The private tourism sector mainly seeks to provide exclusive access to market the land and resources of both the public and community sectors. Communities have realised the need to secure land and resource rights in order to negotiate access and rights to the surrounding land without depending on the state as a "middleman". Without communication at all levels, from government to locals, the transboundary conservation parks may be unsuccessful. If the communities at the borders between countries and at the conservation area borders are not part of the decisions made regarding the parks the conservation efforts are much more likely to fail (Metcalf, 2003). Oversight and support from government is acceptable but is still challenged by the lack of transparency, accountability and equitability (Metcalfe, 2003; Schoon, 2013). Furthermore, transboundary natural resource management (TBNRM) needs a stronger developmental perspective, inclusive of community participation and exclusive of dominant conservation-based organisations. To fully achieve the goal of empowering communities involved in Trans-Frontier Conservation Areas (TFCAs) and TBNRM, the state, donors, NGO's and developers must accept that communities utilising the natural resources within these areas should not be met by imposing strict policies and action plans without a clear understanding of community needs. Without land tenure or security, proposed job creation in the TFCAs is just a passive

form of development. Furthermore, limited trust between stakeholders (communities and conservation institutions) reduces cooperation and full participation among stakeholders (Chifamba, 2012). This limits the impact of the natural resource management conservation efforts. Community ownership will serve to give long-term security, entrepreneurial opportunities and jobs (Mayoral-Phillips, 2002; Chifamba, 2012, UKEssays.com, 2018).

The Ndumo-Tembe-Futi TFCA is an example of a transboundary conservation area that was developed based on rigorous nature conservation as well as rural community development. The establishment of the Ndumo-Tembe-Futi TFCA resulted the Mbangweni community being located right at the centre of the proposed location of the corridor that is to be developed when the Tembe Elephant Park and the Ndumo Game Reserve are joined in fulfilment of the NTF TFCA. This proposed initiative has been met with much resistance and contestation from the local Mbangweni community. This community is exposed to transboundary conservation governance through the proposed linkage of the Maputo Elephant Reserve, the Tembe Elephant Park and the Ndumo Game Reserve as well as through the national border that separates communities that once existed as a single community. The interactions between the Mbangweni community and the proposed NTF TFCA can be described as negative interactions. The restriction of access to many parts of the landscape, spaces and natural resources has left the Mbangweni community feeling neglected and unable to conduct their livelihood activities. This illustrates that (transboundary) conservation may not always play a positive role in the rural livelihoods of nearby local communities.

2.6 Transboundary (National) Governance

Transboundary landscapes were first introduced in southern Africa at the peak of political boundary establishments in the nineteenth century. The separation and isolation of livelihood activities and resources has become problematic especially for communities existing at or near the borders between countries and provinces. A few of these communities still have ties to one another and may still conduct livelihood activities across the borders despite the imposed restrictions and laws of these constructed borders (Mayoral-Phillips, 2002; Thakoli, 2016). The borders imposed upon landscapes these communities occupy, have common and, sometimes unique, governance structures associated with them. Governance can be defined as the system controlling or steering an organisation or initiative (Hufty, 2011; Fukuyama, 2013). Governance is further defined as the government's or governing institution’s ability to make and enforce rules, and to deliver services (gdrc.org, n.d.; Fukuyama, 2013). These conceptualisations of governance are also applicable to the institutions governing over transboundary landscapes.

One of the rationales behind states imposing national boundaries, which ultimately formed institutions governing over transboundary landscapes, was an attempt to improve regional ecological management,

increasing economic opportunities, decreasing cultural isolation and promoting and fostering peace in a bilateral and regional framework. Moreover, a coalition of interests has, in recent years promoted the governance of natural resources across state borders. This has has led to the emergence of several regional transboundary environmental treaties in most parts of sub-Saharan Africa. (Griffin et al, 1999; Linell *et. al*., 2018). Furthermore, Sinthumule (2017) and other authors alike suggest that a justification for establishing transboundary areas was the need to build confidence and goodwill between border nations, as well as stimulate transboundary co-operation in resources management. In addition, transboundary spaces and landscapes were created for the consolidation of land to create such exclusive area. The creation of these spaces is recognised as a social process shaped through local contestation over land, power, and belonging (Sinthumule, 2017). Griffin *et. al.* (1999) and Linell *et. al*., (2018) further suggests that to achieve this transboundary co-operation between neighbouring nations/states, incorporating environmental security by incorporating the significance of natural resources into economic, cultural, and social developments across borders was of great importance. Kaplan (1994) and Linell *et. al*., (2018) highlight the need to incorporate transboundary governance as a solution to environmental degradation on human and wildlife populations that potentially lead to conflict over resources and political instability. It is further suggested that in order to understand the evolution of treaties that formalize transboundary spaces and, hence, transfrontier conservation areas (TFCAs) in African countries—and their continued existence— the role of institutions governing over these spaces needs to be considered (Linell *et. al*., 2018).

National boundaries have worked to establish order and preserve the political perceptions and beliefs of states. National boundaries have been justified with the purpose of securing livelihoods of communities within specific national borders. Natural resources and their availability have had a great impact on the definition of certain national borders. Access to these natural resources is often governed by hardcore policies and rules as well as rigid boundaries restricting access to the resources needed to maintain livelihoods (Mayoral-Phillips, 2002; Linell *et. al*., 2018). Access to resources across borders highlights the challenges of the idea and practice of creating borders between people and nature reserves as well as between different communities. The creation of nature reserves almost automatically induces the emergence of borders between people and the space they once occupied or had access to. Fences and other barriers erected consequently form clear demarcations between people and conservation areas and between different social groups (Ramutsindela, 2014). Natural resources and other political agendas often form the basis on which borders and boundaries are formed, rather than sociological and economic considerations.

2.7 Institutional Fit and Interplay

Redesigning institutions is a necessary strategy for improving the governance of social groups, communities and environmental resources. A high level of fit between the institutional settings and the social and biophysical system could result in a governance structure that performs well over time and is robust and variably immune to external influence, shocks, and perturbations. Institutions can thus be seen to both cause and solve problems (Vatn & Vedeld, 2012). This is supported by Epstein et. al (2015) who recognise the importance of institutional fit for the success and sustainability of socio-ecological systems. An analytical theme of institutional fit and interplay may be useful in exploring issues related to institutional causality, design, and performance (Young, 2008). Institutional fit is described as the match or congruence between governance and biophysical systems. Regime building and adaptation is, therefore, dependent on the fit of the institution in question. Moreover, with the growing role of anthropogenic influence in biophysical systems, fit becomes an increasingly important aspect of institutions and the role they play in governance (Young, 2008). The context of governance is also important for the fit of an institution. An institutional arrangement that works for one system, may be a failure when applied to another system. The lower the homogeneity between resources and systems, the more difficult it may be to apply a single institutional governance method to different resources and systems (Vatn & Vedeld, 2012; Cox, 2012). Institutional fit is closely related to the process of diagnostic analysis, whereby attributes of a problem are examined in order to identify the governance arrangements that might best address them (Young 2002, 2008, 2010). The concept of institutional fit requires that different environmental problems should be treated differently, while similar problems should be treated similarly. For example, environmental problems characterized by unpredictable dynamics with positive feedbacks that create high levels of irreversibility should be managed with an emphasis on early warning systems and high levels of institutional adaptive capacity (Cox, 2012; Young 2002). It is important for the spatial, temporal and functional fit of each of the governing institutions to be determined when making changes to existing institutions or introducing a new institutional arrangement (Cox, 2012; Young 2002; Vatn & Vedeld, 2012).

The concept of interplay, on the other hand, is the perception that "discrete regimes can interact with one another and that such interactions become both more common and significant as the number of discrete governance systems grows in any given social setting" (Young 2008:26). Interplay also occurs when the operations and outcomes of one institution impacts the results and operations of another. Young (2002) distinguishes between horizontal and vertical interplay, and between what he terms functional and political (intentional) interplay. *Horizontal* interplay concerns interplay at the same level of social organization (functionally separated regimes). *Vertical* interplay appears between different levels of social organization: international, regional, national, and local levels as illustrated in the table below (Vatn & Vedeld, 2012).

Table 2. Types of institutional interplay.

	Functional interdependence	Intentional politics of design and management
Horizontal	United Nations Framework Convention on Climate Change (UNFCCC), ozone regimes	Joint funding mechanisms (e.g., Global Environment Fund (GEF))
Vertical	Convention on Biological Diversity (CBD), national forest regimes	Convention on Long-Range Transboundary Air Pollution (CLRTAP), national air pollution regimes

Source: Young, 2002.

An additional aspect to the creation and manipulation of institutional arrangements is the concept of scale. This is described by Young (2008:26) as "the extent to which institutional arrangements are similar and exhibit comparable processes across levels of social organizations ranging from the local to the global." Analysing the scale at which institutions have influence is important for analysing governance systems at different levels of social organization (Vatn & Vedeld, 2012).

Complications with the concept of fit arise with the realisation that no regime can perfectly fit a resource if the regime cannot create and sustain the resources needed. Therefore, the term 'fit' is not only related to institutions fitting ecosystem dynamics, but also about them fitting human motivations and interactions (Vatn & Vedeld, 2012; Cox, 2012). Institutional interplay becomes problematic when individual institutional arrangements have no regard for the impacts that their outputs have on the functions of other institutions (Vatn & Vedeld, 2012; Cox, 2012). The relevant governing actors and groups may forge links between issues and institutions to reach particular goals, such as nesting arrangements but neglect the negative impacts that addressing and maintaining those links may have on other systems around them. (Vatn & Vedeld, 2012). The issue of institutional 'fit' of a set of management/governance issues is increasingly being recognized as important (Armitage et al., 2012). This issue includes the suitability of different institutional arrangements to address specific problems. A significant factor regarding fit that has been identified by some researchers is that resource boundaries rarely fit institutional boundaries (Folke et al., 1998) which results in negative impacts of nested arrangements on other socio-ecological systems around them. Issues related to horizontal interplay appear when regimes operate as functionally split and isolated jurisdictions in a world where these functions are physically linked on the ground. Environmental issues may be caused by present institutions separating and isolating decision-making processes among agents using the same or interdependent environmental resources. It may be argued that the main challenge is not posed by the interplay between the environmental regimes, but rather the dynamics of present property rights,

markets, and public institutions that exhibit weak levels of fit and interplay with the social and biophysical systems involved (Vatn & Vedeld, 2012).

The concepts of fit, interplay offer reasonable labels for aspects of regime analyses that have confronted most research practitioners in the field. An analysis of the concept of fit reveals that it is a core issue to ensure that the regime and institutional arrangements fit the dynamics of the resources and social systems they govern. Similarly, different regimes and institutions may be influencing the same area or the same actors. Hence, their interplay is very important. (Vatn & Vedeld, 2012; Epstein et. al, 2015; Cox, 2012). However, it is not always possible to successfully a smooth and simple model of the concepts of fit, interplay and scale to analyse institutions.

A conceptual framework that incorporates the core variables influencing fit, interplay, and scale issues is needed to effectively analyse different institutional arrangements and regimes under different conditions. A core set of variables for such a framework would include institutions, actors, and physical environments/ resources. It is, however, important to realise that institutions, actors, and environments are of different types, and are related to different issues and different levels of organization (Vatn & Vedeld, 2012; Armitage et al., 2012). Cox (2012) and Schlager (2007) further elaborates that the fit between two institutions can be seen as the relation of those institutions in such a manner so as to produce a desirable outcome where a misfit, the converse, would relate the combination of such institutions resulting in an undesirable outcome. It is, therefore, important to realise that there really is no such thing as an overall "fit" of a system. A system or institution could be fit with respect to one outcome but not be suitable or fit to another (Cox, 2012; Schlager, 2007). This is true and is evident in the study site used in this project. The institutional fit and interplay in the social and biophysical regimes must be analysed and assessed differently for each regime as each has different needs and different types of key variables such as governing institutions, actors and natural resources. The institutions variably fit and impact each other in the Mbangweni Community, the Tembe Elephant Park and the Ndumo Game Reserve landscape.

2.8 Institutional Bricolage

The concept of institutional bricolage stems from the idea crafting of institutions for specific needs, thus, suggesting that specific institutions are deliberately developed for particular functions. Institutions developed for resource management may be multi-purpose, promote both intermittent

and robust management, may be an integral part of social relations and may be subject to negotiation (Cleaver, 2000). Douglas (1987) elaborates on the concept of `intellectual bricolage' (Douglas,1987: 66) and extends it to illustrate how the construction of institutions and decisions to act are rarely made based on rational choice. Douglas (1987) states that instead, institutions take it upon themselves to do the thinking on behalf of the people they stand for and that institutions are constructed through a process

of bricolage – which entails gathering and applying analogies and styles of thought already part of existing institutions (Douglas, 1987). A less conscious or intended construction of institutions is referred to as institutional leakage whereby "sets of rules are metaphorically connected with one another, allowing meaning to leak from one context to another along the formal similarities that they show" (Douglas, 1973: 13).

Expanding on the concept of institutional bricolage, Cleaver (2000) uses this term to suggest how mechanisms for resource management are borrowed or constructed from existing institutions, styles of thinking and sanctioned social relationships. Rather than being consciously and rationally crafted, institutions have been known to evolve through multiple processes involving both conscious and unconscious decisions and actions, unintended consequences and a large amount of borrowing of acceptable patterns of interaction from created social relationships. Institutions formed in this way are not necessarily weak or unsustainable but may on the contrary be highly robust due to their inter-linkages with the social and historical background (Cleaver, 2000). The term 'institutional bricolage', therefore provides a means of conceptualising how mechanisms for collective action and resource management are borrowed or reconstructed from multiple existing sources such as existing institutions, styles of thinking, social identities and social relationships. Cleaver (2000), and other authors alike, view institutional bricolage as an active, conscious creative process of adapting norms, values and social arrangements to fit new purposes, while also reflecting and being shaped by deeply embedded unconscious principles.

The formation of institutions by people, is deeply rooted in peoples' culture, values, and belief systems, and indeed enable them to participate effectively in this social life. Therefore, institutional arrangements for multiple social purposes (from practical resource management to religious life) and the multiplicity of livelihood strategies that people employ and engage with are all to a considerable extent integrated. The level to which this integration exists is also dynamic, has moral value, and is constantly negotiated. Institutions, therefore, must recognise the social dimensions and institutional integration, and find ways to encourage innovation that is consistent with peoples' existing values and life patterns when making major changes to the institutions themselves or the laws and policies used to govern communities/states (Merrey & Cook, 2012). Fostering *bricolage* processes involves negotiating and facilitating local change agents' creative processes as opposed to imposing new 'best practice' techniques. Social and technical innovation does not automatically happen as a result of researchers' findings and insights, and they do not occur because politicians or community leaders feel that it should occur. The process of socio-technical innovation is a complex, unorderly, do-it-yourself *bricolage* process. Neither researchers nor politicians can determine the direction of change or predict the pace at which change will occur. But with a deeper understanding of the institutional landscape and social processes,

researchers and politicians can provide support to communities to improve their livelihoods and well-being (Merrey & Cook, 2012).

The concept of institutional bricolage may be adapted to the case study of the Mbangweni community. This area has institutional laws and policies, related to borders and constructed boundaries, imposed on it. This has had major consequences on the area's livelihoods and access to resources. The creation of conservation and political institutions that govern this area should have space in future institutional changes and developments for the inclusion of the residents' socio-political perceptions and the considerations of what residents specify as the most pressing needs for sustaining their livelihoods. This would allow for the creation of more accommodating institutions that could work to simultaneously address conservation and community development needs.

Although not deployed normatively, this research project intends to use or convey institutional bricolage as a normative concept i.e. how landscapes should be adopted and used by institutions and entities on a normal basis and show the benefits of applying and adopting bricolage/bricolage-like approaches to co-existence in a single landscape. This research intends to show how institutional bricolage could be used adopted as a normative concept rather than a more critical concept for analysis as a unique approach to the theoretical application.

2.9 Conceived, Perceived and Lived Spaces

The construction of landscapes by the key entities occupying and governing them is important when looking into transboundary landscapes. The ideologies and processes behind the conception, perception and lived realities of these spaces give insight into how spaces and landscapes are a product of and produce social spaces. Hansen (2013), Lefebvre (1991; 2008), Roth (2008) and other scholars alike go into greater detail regarding the theory on the social production of space.

In his work, Lefebvre proposes that space is a product of, and at the same time produces, political-economic processes (Lefebvre 1991). He maintains a position that a spatial theory is a social theory and vice versa. In other words, it can be said that there is a logical flow and interaction between a society and that society's space. He also argues and highlights the contradictory, conflicting and ultimately, political nature of the processes used to produce space. These processes are usefully applied to the case of protected area conservation practices in Southern Africa, i.e. conservation efforts such as 'Peace Parks' are "argued to be both a tool to foster co-operation between states (The Peace Parks Foundation 2013), and an example of state-dominated space, leading to the alienation, of local users and inhabitants from land and management practice" (Hansen, 2013: 20). The representations of space are embodied in spatial practice, physical interventions that change the materiality of the environment and the appropriation of sites by living bodies. Space is dominated through attempts to control the spatial patterns of residents both adjacent to and in the conservation sites by means of borders and fencing. In reaction, local communities who have been politically and economically marginalised from

development processes resist intrusions on their spaces and landscapes. Such practices can be understood in terms of Lefebvre's concept of spatial appropriation, as they are concerned with modifying space in order to serve the needs and possibilities of local people. It has also been shown, however, that local people continue to follow their own social conventions and norms, in preference to new policy and legislative frameworks imposed upon them from the conservation institutions. Spatial conflicts arise through these tensions between the subjective space of users and inhabitants (representational (lived) space) and the enforced objectives for the conservation management. In turn, local lived space is impacted upon through new rules of governance, often leading to exclusion in decision-making and other alienating effects, including the reshaping of old ethnic identities and the imposition of new social-ecological relations on local communities (Hansen, 2013)

Lefebvre suggests a method for analysing processes of space production that indicate that production is not only viewed as the creation of material things such as space, but also as an essential part of the reproduction of social relationships (Konzen 2013). Social space, therefore, can exist simultaneously as a 'material product' that results from the process of social production; a 'productive force' affecting social production and as the 'physical' site where living bodies interact to build social relations (Konzen 2013). To illustrate the production of social space, Lefebvre's dialectical analysis of this production relies on three elements of a spatial triad – namely: conceived space, perceived space, and lived space (Lefebvre 1991) (Figure1). Social space is produced by dialectical interrelations amongst these three categories.

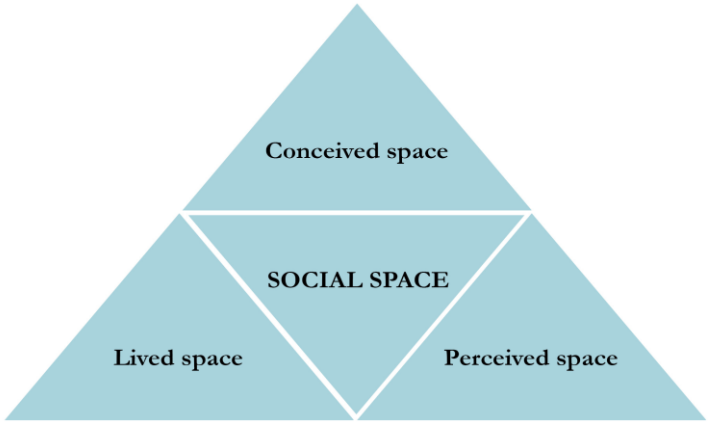


Figure 1. Diagrammatic illustration of Lefebvre's conceptual triad.
Social space is produced by dialectical interrelationships amongst conceived space (or representations of space), perceived space (or spatial practice) and lived (or representational) space (Hansen, 2013).

Lefebvre's (1991) triad consists, firstly, of conceived space (this eludes to the representations of space). This is the space where professions in the realm of science, planning, urban studies, social engineering, politics and conservation exist (Lefebvre 1991; Hansen, 2013). This category is illustrated by the representations of conservation spaces that are that is developed and planned for through policy documents and conservation plans. Lefebvre's critique of conceived space rests on the idea that the planning ideology is reductive in its practice. The triad consists, secondly, of perceived space (also known as spatial practice). This category of the triad is distinguishable from the first category as it

comprises physical interventions that change the materiality of the environment (Hansen, 2013). Hansen (2013) uses "fencing around protected conservation areas as well as the appropriation of material sites by living bodies" as an example as an illustration of this category (Hansen, 2013: 22; Konzen 2013). Exploring this category further, Lefebvre distinguishes between dominated and appropriated space. Dominated space refers to "a space transformed– and mediated – by technology, by practice, the realisation of a master's project" (Lefebvre 1991: 165; Hansen, 2013: 22). In contrast to this, an appropriated space is one that is taken over by a group and is "a natural space modified in order to serve the needs and possibilities of [that] group" (Lefebvre 1991, 165; Hansen, 2013: 22). Li (2007) highlights how local people will often prioritise their own social conventions and norms and choose not to follow new policy and legislative frameworks set for conservation management and imposed upon them and their livelihoods (Hansen, 2013).

The third and final category of Lefebvre's triad is the lived space. This eludes to the (subjective) space as directly lived through its associated images and symbols, and hence the space of "users and inhabitants" (Lefebvre 1991: 39). Hansen (2013) refers to this as an analysis of place or what Lefebvre calls "everyday life" (Hansen, 2013: 22). Simply put, this is the reality of the space that is lived in and portrays the actuality of what happens on-the-ground in an area. This is the space in which patterns of existence and norms are developed, displayed and/or implemented to cement and naturalise the existence of the groups or individuals in that space (Thrift 2009; Hansen, 2013).

In theorising protected areas as processes of the production of space, Roth (2008) argues that through the continual processes of spatial production, the establishment of protected areas can be understood as a moment of spatial reorganisation. She proposes a relational approach to the spatiality of conservation conflict, arguing that space both results from and influences social, political and economic processes. Referring to Lefebvre (1992), she argues that space does not merely exist in relation but is also produced in relation. Representations of space are analysed through broad policy frameworks for regional development in Southern Africa, as well as through legislative documents specific to the implementation of World Heritage conservation. These policy and legislative documents are given made into a reality through spatial practice for conservation management. Spatial conflicts emerge through the appropriation of space by local people. In such cases, it would be likely that the representations of space contradict local representational (lived) space (Roth, 2008).

The dialectical interaction between spatial practice and representational (lived) space can be further analysed in terms of changing social and social-ecological relations, arising through the introduction of new values and norms in conserved space. Moreover, the view on the social production of conserved nature is of land as a commodity, rather than as a social-ecological resource for livelihood generation. Spatial conflicts, therefore, emerge where space is dominated through state-led top-down conservation management efforts, and local communities in turn appropriate space for their livelihoods. In this

regard, analysing dialectical spatial practices – both in terms of dominated and appropriated space– provides some insights to questions of social justice, through a focus on state power in its relational engagement with local space. This holds important implications, as conflicts over land use in conservation areas infringe on efforts to restore local land and resource rights against national and global interest in conservation (Whande 2010).

It is evident that the situation in the transboundary landscape that the Mbangweni area, the Tembe Elephant park and the Ndumo Game Reserve occupy may fall within Lefebvre's analysis of space production. This transboundary landscape is conceived through policies and documents developed by EKZNW for natural resource conservation and by the local government. The physical manifestation of the policies and documents of EKZNW in the form of the Tembe Elephant Park and the Ndumo Game Reserve illustrates the underlying ideologies of Lefebvre's perceived spaces. EKZNW's interventions show that they perceive the space, primarily, as an area of nature conservation. This perception conflicts with the lived space that is experienced by the residents of Mbangweni. The livelihood aspirations of the Mbangweni community may diverge from the conservation aspirations of the game reserve and the elephant park.

The framework of institutional fit, interplay and bricolage is used in conjunction with Lefebvre's spatial triad of conceived space, perceived space, and lived space as both frameworks have the potential to encapsulate the policy and institutional situations versus the lived realities of the people in Mbangweni. The institutional fit, interplay and bricolage frameworks map out the situation of the institutions governing the transboundary landscape and how they impact the livelihoods of the rural community and are complimented by Leferbvre's spatial triad which reflects how the governing institutions and conservation fit or do not fit the perceptions of, conceptions of and lived realities experienced by the Mbangweni community in this transboundary landscape. This research project, therefore, saw it beneficial/ advantageous to use these frameworks jointly to truly and robustly reflect the reality of the impact of transboundary landscapes' institutions and entities on the rural livelihoods of the community within that landscape.

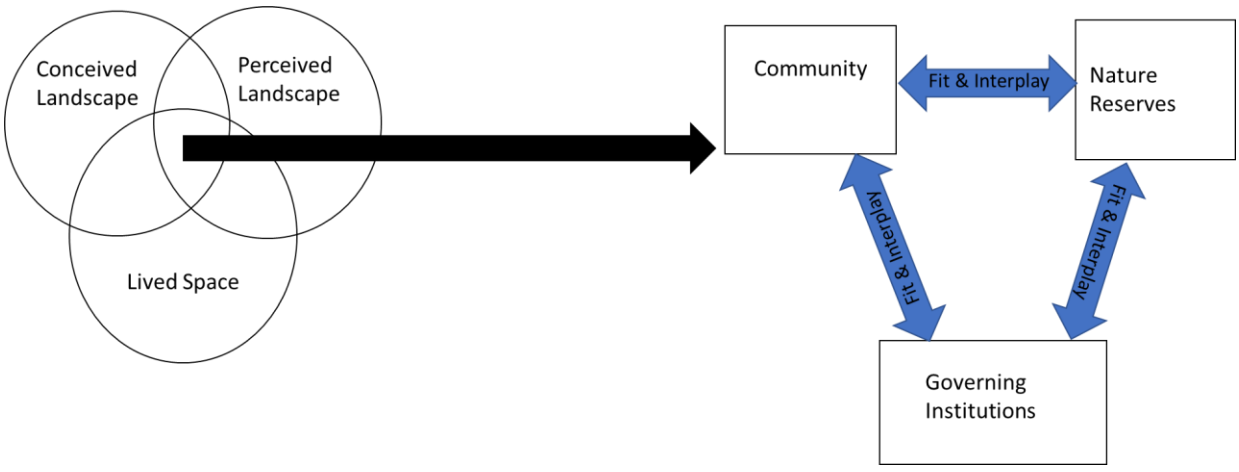


Figure 1. An illustration of conceived, perceived and lived space feeding into the understanding the fit and interplay of entities and institutions

2.10 Conclusion

Rural livelihoods in many parts of South Africa co-exist with efforts to conserve natural resources. In a few instances, nature conservation has led to the establishment of conservation areas that span between borders and boundaries. Such is the case with the proposed Ndumo-Tembe-Futi TFCA which would have the Mbangweni community be located right at the centre of the corridor that is proposed for joining the Tembe Elephant Park and the Ndumo Game Reserve in fulfilment of the NTF TFCA. This proposal has been met with much resistance and contestation from the local Mbangweni community. This negative interaction between the TFCA's governance and the rural livelihoods of the Mbangweni community illustrates the mostly negative impact that the transboundary landscapes and their governance may have on the rural community's livelihoods. The growing advocacy for transboundary conservation areas is met with equally growing criticism of these transboundary conservation efforts (IUCN 2002, Munthali & Metcalfe 2002, Wolmer 2003) as concerns rise over the placement of conservation as a priority over social justice (Metcalfe, 2003).

The location and specific contexts of the conservation boundary and border potentially play different roles in different rural community livelihood. It is, therefore, important that the institutions that govern over the conservation areas as well as those that govern over the rural areas fit and interplay with each other as well as with the context and needs of the natural resources they conserve and the local communities they serve. Institutions should, therefore, be created with more flexibility that would allow for modifications to their policies and structures. This would allow these institutions to accommodate the changing needs of natural resource conservation without neglecting the needs of the local rural communities that share landscapes with the nature conservation efforts. Lastly, the conceived, perceived and lived spaces occupied by the Mbangweni community, the elephant park and the game reserve provide illustrations of Lefebvre's analysis of the production of space. The conception of the space through policies may not necessarily match the spatial practice (perception and physical interventions) and the lived realities of the space in question. In such a case, institutional reorganisation, re-evaluation and bricolage would be important.

In the next chapter, this research project looks at the methods employed for collecting and analysing the data, the ethical considerations taken when collecting the data as well as the study limitations encountered during data collection and analysis.

Chapter 3: Methodology

3.1 Introduction

This chapter provides the research approach and methods used for collecting and analysing the data that informed this study. Qualitative data-gathering methods were primarily used. The fieldwork and on-the-ground data collection was done at Mbangweni area near the Ndumo Game Reserve and the Tembe Elephant Park. This study used the case study and grounded theory approaches to develop an understanding of the impacts of transboundary nature conservation on rural communities. This approach was also used to supplement the limited information on the perceptions held by the rural people of Mbangweni and associated traditional authorities on transboundary conservation. The Grounded Theory Approach allowed the research to draw on real-life experiences and perceptions of local community members and traditional authorities. In addition, oral history interviews, focus group discussions, key informant interviews and a ranking exercise were conducted to gather qualitative data used to inform this study.

3.2 Research Approaches

3.2.1 Case study approach

This research project uses a study site that has the characteristics of a transboundary landscape well worth investigating. The study site chosen for this project is the Mbangweni area in northern KZN near the southern border of Mozambique and adjacent to the Ndumo Game Reserve and the Tembe Elephant Park. This site was chosen for its close proximity to the nature reserves nearby and to the national border between South Africa and Mozambique. The study site used in this project– Mbangweni community, Ndumo Game Reserve and the Tembe Elephant park– was chosen also based on the landscape it presents i.e. a transboundary landscape in which multiple interactions between community members, nature conservation, traditional authority and national/local governing structures occur. This, therefore, motivated the suitability of this study site to be used to investigate and analyse the (poorly recorded and reported) perceptions of transboundary landscapes held by the local rural community and associated traditional authorities.

3.2.2 Grounded theory approach

The grounded theory approach was used to collate qualitative data that was collected to inform this study. It is a research approach that enables a study to develop a theory which would offer an explanation about the main concerns and issues of the population in its substantive area and how those concerns and issues may be resolved or processed (Scott, 2009). Grounded theory can, therefore, simply be defined as the discovery of emerging patterns in data as well as the generation of theories from data

(Holton et. al., 2015). Grounded theory involves the progressive identification and integration of different categories of meaning derived from data (Charmaz, 2006). As a research method, it has provided researchers with guidelines on how to identify categories, how to make links between categories and how to establish relationships between these categories developed from the patterns observed in the data collected (Charmaz, 2006).

The grounded theory approach conceptualizes the role of the researcher as a witness in the research process. The researcher's role is only to use their skills to represent, in a systematic manner, a clear overall picture of the social reality in question. The researcher's identity and standpoint must remain secondary (Charmaz 1990, 2003). Finally, it is important to note that the grounded theory methods can complement other approaches to qualitative data analysis, rather than stand in opposition to them (Charmaz, 2006).

This approach encouraged the study to investigate the experiences and lived realities of the people in Mbangweni rather than relying solely on literature and other academic records of the impacts of transboundary landscapes on rural livelihoods. Furthermore, this approach allowed the study to gather qualitative data through different methods and subsequently merge, categorise and analyse this data to reveal patterns perceptions of transboundary landscapes.

3.3 Theoretical Analysis

Rural livelihoods exist in spaces and landscapes where they prioritise their livelihood needs and subsequently the acquisition of the necessary resources. These same livelihoods can co-exist with other entities/activities (such as nature conservation) which would prioritise other uses or needs that may or may not contrast those of the rural livelihoods. Where the livelihoods and other entities, that co-exist with the livelihoods, fit and interplay (or do not) may also be dependent on the governing institutions enforcing laws and policies upon these entities. The fit and interplay of the institutions may be created from the way in which each entity conceives, perceives and exists in the landscape. This research project, therefore, intends to adopt this theoretical framing to collect and analyse data that speaks to the co-existence of rural livelihoods with tertiary activities and the governing institutions positioned over both entities. This research project intends to analyse the data collected against the theory of Lefebvre's triad of space creation which would hopefully lead to an understanding of how entities and institutions fit and interplay with each other and with the lived realities of the livelihoods on the ground in order to understand the dynamics of the co-existence of rural livelihoods with other entities in a transboundary landscape.

3.4 Data collection

The data collected for this study was primarily qualitative. Most of the data (excluding formal spatial maps) was collected through interactions with the community members of Mbangweni, representatives of the traditional authority that governs over the rural area as well as representatives from the Ndumo Game Reserve and the Tembe Elephant Park. To support the literature used to inform the research and the approaches employed to conduct the study, desktop research was initially conducted to guide the development of the project. This was followed by key informant interviews, focus group discussions and oral history interviews during the study site visits as discussed below.

3.4.1 Primary (desktop) research

Before going to the study site, the case study was researched extensively. To ensure that as much data had been sought and gathered to be able to inform and guide questions and responses to the participants during the field work process. Before continuing with the fieldwork, desktop research was done on the case study used in this research project (i.e. the impact of transboundary landscapes on the Mbangweni area) to avoid duplicating studies that may have been done using the same approach and angle that this project intended to use. The desktop study yielded results of studies that had been done on the impact of converting lone-standing conservation areas into Trans frontier conservation areas (Metcalf, 2003; Zbicz, 2003; King, 2010; Ramutsindela 2004 and 2014; Thakholi, 2016; Sinthumule, 2017). However, these and other similar studies provided limited information in terms of a) putting forward issues related to the impacts of trans-frontier nature conservation on rural livelihoods; b) using the exact combination of study sites used in this research project (Mbangweni rural community and the Ndumo-Tembe-Futi TFCA ; and c) exploring the rural livelihood experiences of communities that are separated by a national border and at the same time exist within a proposed national transboundary conservation area (Mbangweni community within the Mbangweni corridor of the Ndumo-Tembe-Futi TFCA). The primary desktop research allowed for the Mbangweni community location and the location of the Nature Reserves in question to be established beforehand to ensure that the entities in question were accurately located and visually represented.

3.4.2 Fieldwork

The physical and on-the-ground fieldwork consisted of interacting with key informants– who work at the nature reserves but also reside in the Mbangweni area and the tribal authority that governs over the Mbangweni rural area– as well as conducting focus groups and oral history interviews with members of the Mbangweni area.

The table below summarises the schedule followed during the data collection process at the study site

Date	Activity	Key Informant/Group	Code	Institution/Organisation
20 May 2019	Meeting with Traditional Authority Representative &	Traditional Authority Representative	TTA	Tembe Traditional Authority
20 May 2019	Oral History Interviews	Mbangweni Community residents	$OH_1 – OH_3$	Mbangweni community members
21 May 2019	Oral History Interviews	Mbangweni Community residents	OH_4 -OH_8	Mbangweni community members
21 May 2019	Key Informant Interview with Ndumo and Tembe Game Reserve employees who are also Mbangweni community members	Nature conservation representatives	$EKZNWM_1$ $EKZNWM_2$ $EKZNWM_3$	Ndumo Game Reserve and Tembe Elephant Park and Mbangweni community
22 May 2019	Focus Group 1	Group category: Youth of community	FG_1	Mbangweni community members
22 May 2019	Focus Group 2 and uMkhandlu[4] meeting	Group category: Elders of community	FG_2	Mbangweni community members
23 May 2019	Transect Walk	Mbangweni Community resident and Field Assistant	MTW	Mbangweni community member
23 May 2019	Oral History Interviews	Mbangweni Community residents	$OH_8 – OH_{10}$	Mbangweni community members
23 May	Key Informant Interview	Community Liaison: EKZNW employee and Resident of Mbangweni	C L	Tembe Elephant Park and Mbangweni community

3.4.2.1 Key informant interviews

Key informant interviews are describable as in-depth interviews of a select (non-random) group of experts who are most knowledgeable of the organization or issue. Key informant interviews are especially beneficial as part of an initial assessment of an organization or community issue. They allow for a broad, informative overview of what the issues are. While the selection of key informants is not random, it is important that the group of people being interviewed is varied and mixed, thus, reflecting

[4] *uMkhandlu* is the isiZulu word which means “tribal council”

all possible sides of the issue at study. Key informant interviews are most commonly conducted face-to-face and can include closed- and open-ended questions. They are often audio-taped and transcribed so that a qualitative analysis of the interviews can be performed. Key informant interviews are rarely used as the sole method of data collection for a study or particular issue, as there is little generalizability that can result from the interviews (Parsons, 2011). This method of data collection was important for this study as valuable and in-depth information was gathered through face-to-face contact with individuals who had knowledge of the Mbangweni area, the tribal authority and the nature reserves.

Three (3) key informant interviews were used in this study to get a better understanding of the perceptions held by the entities involved in this study. These interviews were conducted on a one-on-one basis with a representative of the tribal authority, with employees of the Ndumo Game Reserve and the Tembe Elephant Park as well as with the Community Liaison who is an EKZNW employee and a resident of Mbangweni. The purpose of these interviews was to investigate how these entities understood the transboundary landscapes created by the Ndumo-Tembe-Futi TFCA and the role that these transboundary landscapes play in rural livelihoods. These one-on-one interviews were casual, semi-structured and conversational.

3.4.2.2 10 Oral history interviews

Oral histories are based on the stories of people within a community or area who, through words and tales, depict the way their area, community and surroundings were in the past. This is done in order to bring about an understanding of how history has played a role in shaping current phenomena. Oral history is founded on the idea of an active individual participant whose memories, experiences and testimonies from the past about their own lives or collective social processes, inform the interview (Seale et al., 2004; Mbatha, 2018). The role of oral history in interdisciplinary research is important and relevant as it opens up opportunity for new enquiry about historical events that had been forgotten or ignored in the present times. Oral histories provide evidence and testimony that is cross-referenceable across time. This is important as existing historical records and evidence that are mostly written by colonial and apartheid actors tend to be written from a self-serving perspective that highlights the role and interests of the colonial or apartheid governments. The danger of this being the omission of several key actors and events involving local people and their livelihoods. Therefore, many accounts about the nature of African societies written by a large number of history writers in colonial times are reflective of assumptions rather than facts of the existence and livelihoods of local people as the contexts of these societies was not fully understood by those who wrote and recorded their histories (Delius, 2008; Mbatha, 2018).

Oral history interviews proved to be a fundamental method for extracting historical data about the Mbangweni area as pre-colonial, African societies could not document any evidence about their social practices. Oral histories have thus become a way to elicit specific information relating to issues about power and tenure in rural contexts that cannot be provided by archival or archaeological evidence (Delius, 2008). Furthermore, the majority of the historical information pertaining to the customs, traditions, and other aspects of the local people's livelihoods is mostly contained in the minds of the older people in the community. This information, in most cases, has been passed down or told as tales to younger generations, without being properly documented.

Ten (10) Oral history interviews were conducted with multiple members of the Mbangweni area to allow them the chance to relay their own history and its evolution over the years. These community members were selected at random to allow everyone in the community a fair chance at representing the rural community. These individuals were interviewed and asked questions on the history of Mbangweni and its relationship with the adjacent nature conservation areas. The purpose of these interviews was to gain an in-depth insight into the perceived changes, benefits and losses of potentially developing a Transfrontier conservation area that links three nature reserves across South Africa and Mozambique to each other. Furthermore, these one-on-one interviews gave each of the interviewees a chance to not only express their perceptions as individuals but to recall the changes to the landscapes that they have each observed over the years.

The questions asked were open-ended and the interviews were conversational, thus, allowing the participant to feel comfortable with answering the questions and expressing their views. Understanding the personal perceptions and individual interpretations of transboundary landscapes from the participants was key to the study.

3.4.2.3 Transect walks

Transect walks are a participatory exercise, where members of the community together with researchers or organization representatives walk through different areas of the neighbourhood, interviewing passers-by and drawing a map with observations of the characteristics of the area and its issues. There are many benefits to transect walks:

They are one of the most used participatory methods (Chambers, 1997) of collecting data. They change the perspective of the researcher, who acts only as an observant. As researchers or organization experts often have very limited knowledge of local practices and customs, the walk acts as a platform for mutual interchange of knowledge between researchers and locals. The very visual focus of the exercise inspires a deep understanding of different concerns. This data collection method also allows the researcher/expert and the local people to find a common language during the walk. Despite its

simplicity, this method is not immune to shortfalls and problems. As in so many participatory processes, it might be challenging to find representatives from all parts of a community. Depending on the time of the day, the season and events like school holidays, the transect walk only shows a very specific time and situation, Lastly, ethical issues concerning the safety of participants can arise (Puttkamer, 2017).

This exercise was carried out to gain better visualisation of the study area in question. The transect walk was conducted with a member of the Mbangweni community as a tour guide through the community. This walk allowed for the study to get a better understanding of the location and features of the community in relation to the proposed Ndumo-Tembe-Futi TFCA and the Mbangweni corridor, in particular.

3.4.2.4 Focus Groups

Focus groups, also known as discussion groups, are a key data gathering method for qualitative enquiry (Cloke *et al*, 2004). Focus groups are characterised by a carefully selected group of people who discuss particular questions raised by the researcher. The focus group discussions were necessary and important for this research project as they provided an in-depth understanding of the more difficult issues relating to the impact of transboundary landscapes and natural resource conservation on their livelihoods as well as the impact of governing institutions present in this landscape. These group discussions were conducted with the Mbangweni community members. Participants were identified through purposive sampling. Purposive sampling is a non-random sampling technique used to identify informants who have particular knowledge about key aspects of the research (Cloke et. al., 2004). The participants of the focus groups were selected and grouped according to their age ranges. Those that were considered to fall in the group of the younger generation (+/- 16 to 25 years old) in the area were grouped into one focus group and those that were considered as the elders of the community (30 years and above) were grouped into the second focus group. This allowed the study to get perspectives and perceptions of the area from two distinctly separate groups of community members.

The aim of these group discussion sessions was to try and get as much of the community members' perspectives and perceptions of transboundary landscapes by engaging with the focus groups in order to determine the power structures within the community as well as external power dynamics that influence rural livelihoods.

Two focus groups discussions were conducted during the visit to the study site. The process of conducting focus groups involved prior communication with a community member, a key informant who would act as the link between the researcher and the Mbangweni community/traditional authority figure(s). The focus groups were conducted in one day. The first focus group discussion (FG_1) was held in the morning and consisted of 6 people. The second discussion group was held in the afternoon of the

same day and consisted of approximately 10- 15 people. This range in the number of participants was due to the fact that several of the members had to leave the session early and, therefore, could not stay for the entire session. In these focus groups, open ended and discussion-inducing questions were asked in relation to the transboundary landscapes and how the community's rural livelihoods would be impacted by the joining of the nature reserves and, consequently, the establishment of the Mbangweni Corridor.

Participatory Rural Appraisal (PRA) techniques were used to collect qualitative data from the focus groups. These PRA techniques included participatory mapping exercises, timeline construction, ranking exercises and Venn diagrams. These techniques encourage participants from the community to actively raise their views on the issue at hand (Driyamedia, 1996) and elicit information about different aspects of livelihoods, conservation governance and transboundary landscape occupation.
Lastly, the use of PRA methods makes it easier for participants to engage with the questions and to feel confident about raising their views about different issues that are brought up (Driyamedia, 1996).

- **Participatory Mapping**

Participatory Mapping is a method used within Participatory Rural Appraisal (PRA), in participatory research as well as in planning and management initiatives for development activities at a local level. Broadly, participatory mapping is the creation of maps by local communities – often with the involvement of supporting organisations including governments, NGOs or other actors engaged in development or land-related issues. The results of this activity provide a valuable visible representation of what a community perceives as its place and the significant features within it. Carrying out this participatory mapping activity can contribute towards building community cohesion, it can also help to engage participants, allow them to be involved in resource and land-related decision-making processes, highlight urgent land-related issues and ultimately contribute to empowering local communities and their members (IFAD, 2009; Lienert, 2019).

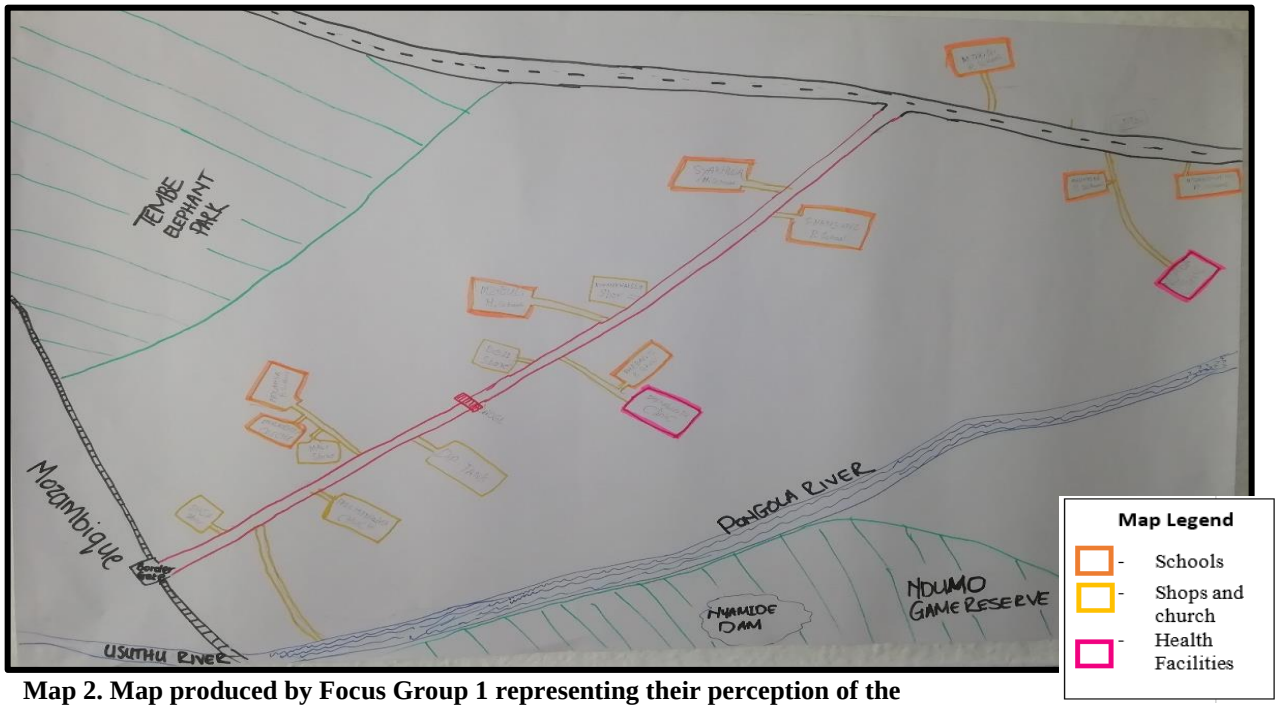
Participatory Mapping, also termed Participatory GIS (PGIS), is a method of collecting and recoding spatial data provided by stakeholders and is primarily based on public/stakeholder participation. Examples of participatory mapping could include sketch mapping, scale mapping, and transect walking through the study site (Chambers 1994; World Bank 1996). These methods of participatory mapping work to capture the stakeholder/community/public groups' perceptions and ideologies related to local issues (Dunn, 2007). Simply put, participatory mapping is a map-making process that attempts to make visible the association between land and local communities by using commonly understood and recognised cartography processes. Participatory mapping is important for this study as it provided the residents of Mbangweni an opportunity to represent a socially and culturally distinct understanding of their landscape and include information that is excluded from mainstream maps. Therefore, it can

become a means of empowering by allowing the local community to represent themselves spatially (IFAD 2009).

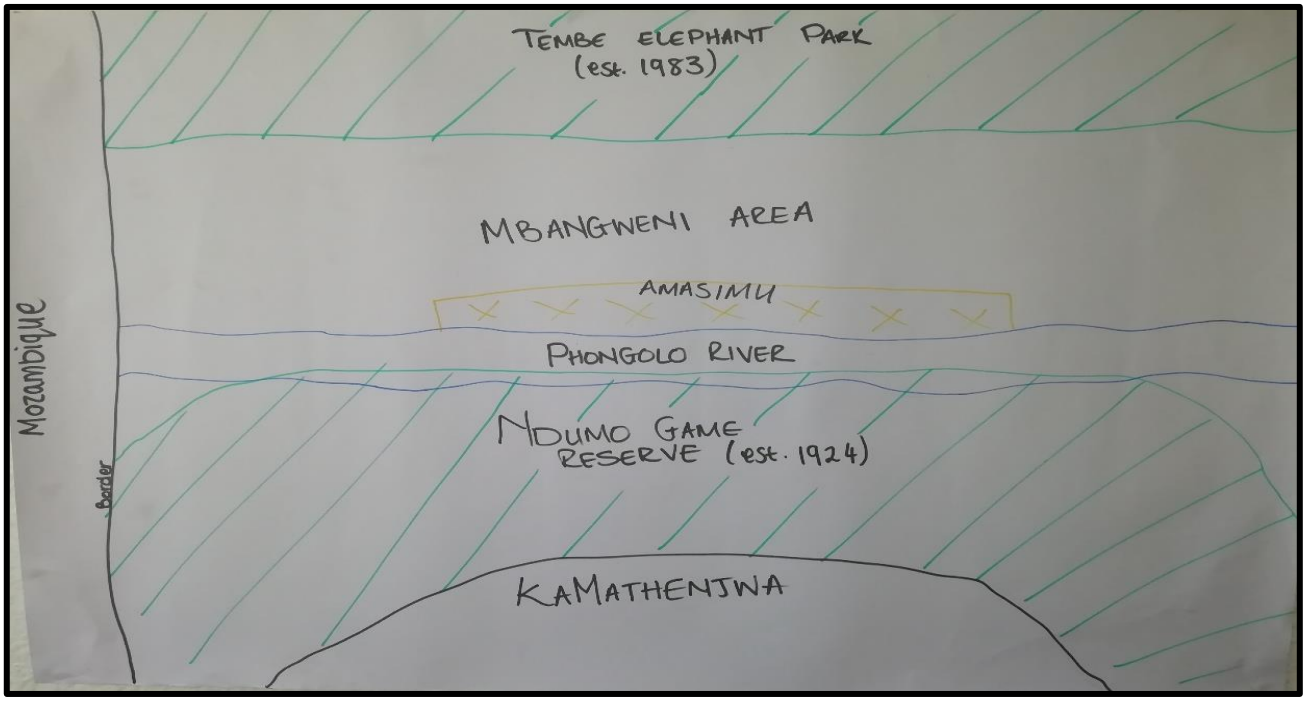
The aim of using this method is to allow for the focus of the research to be on social issues rather than spatial issues. The Mbangweni shares both spatial as well as social relations with the proposed Ndumo-Tembe-Futi TFCA and Participatory mapping is therefore used to capture the community's perspective on their relations with the nature conservation nearby as well as spatially visualise their perceptions of the transboundary landscape they occupy.

The focus group participants from both focus groups were asked to participate in a mapping exercise in which they were given the opportunity to draw a map of their community and its features as they perceived it. The focus group members were also asked to include any perceived benefits and losses of their neighbouring land uses (the Nature Reserves) and nearby national borders and boundaries.

At the end of each of the focus group sessions, detailed hand-drawn maps that represented the way in which the community perceive the transboundary landscapes they occupy and resources they use were produced (Map 2 and Map 3). The information yielded by this exercise is useful for analysing the perceptions that the local rural communities hold on transboundary landscapes as well as gaining better insight into how the local communities understand these landscapes and resources.



Map 2. Map produced by Focus Group 1 representing their perception of the landscape



Map 3. Map produced by Focus Group 2 representing their perception of the landscape.

- **Timelines**

Timelines of the perceived changes in the occupied landscapes was an important tool used in the focus groups to understand the history of the communities, the changes in their use of resources as well as the way in which they have benefited or incurred losses from landscape changes over time. Timelines may be used to reveal important community events that occurred in the past, such as droughts, floods, forced removals, restrictions on access to and use of certain natural resources etc. This technique helps researchers understand the present conditions and behaviours of the community by acknowledging the past events and behaviours. Timelines may be used to collect information on trends of natural resource use by the community as well as changes in land ownership. Elders in the community are usually the most knowledgeable of historical events and changes and are, therefore, crucial for providing historical information that can be used to construct timelines (Mbatha, 2018). Timelines may then be created using the information gathered in focus group discussions as well as during oral history interviews. An illustration of a timeline constructed from the FG_2 is presented below (Figure 2):

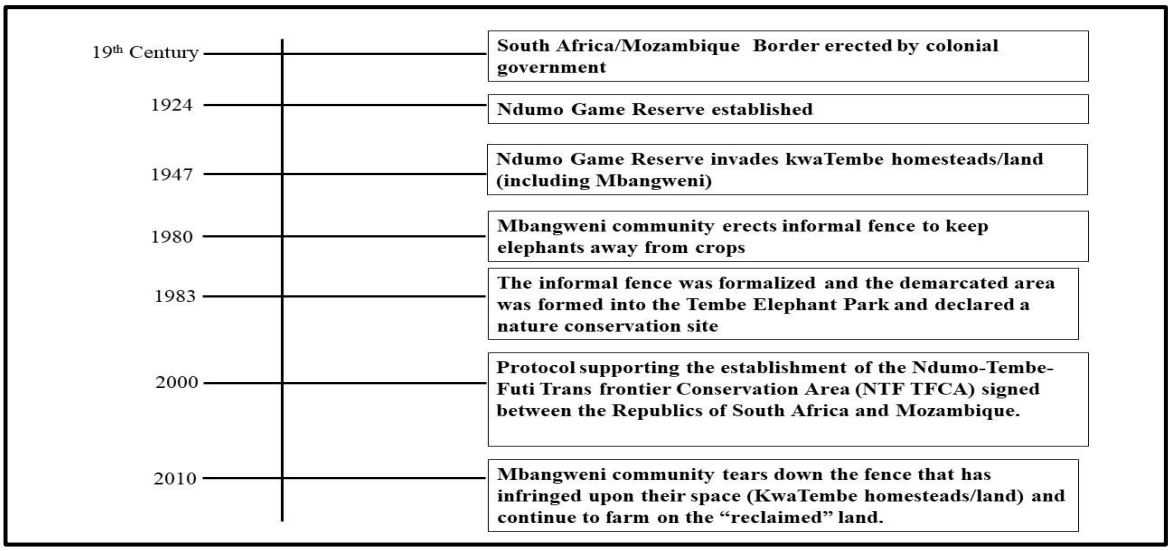


Figure 3. Timeline Depicting Historical Context of Livelihoods in and around Mbangweni

- **Venn Diagrams**

Venn diagrams, another PRA technique, were used in the focus group discussions conducted in this study. Venn diagrams are used to understand the significance of actors in a given network and to depict the relationships that exist among those actors (Asia Forest Network, 2002; Mbatha, 2018). Figure 3 below illustrates an example of a Venn diagram that was conducted in the focus group discussion with both focus groups.

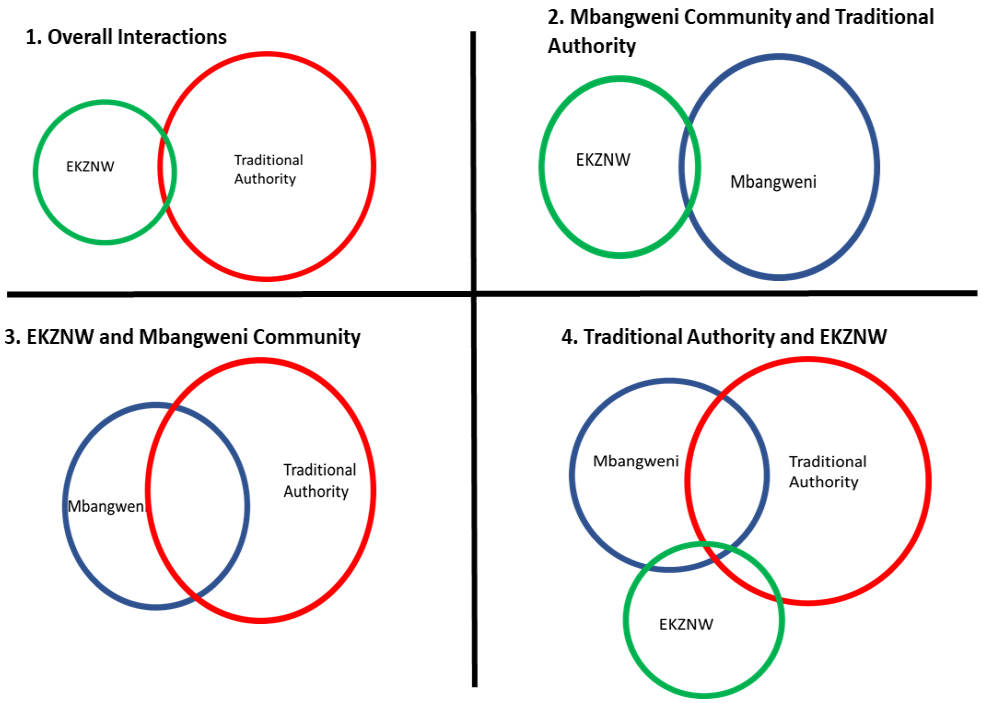


Figure 4. Venn diagrams representing community's perceptions of institutions' interactions

The Venn diagrams technique was also used in the focus group discussions. This technique was used to understand the significance of the different actors that contribute towards the livelihoods of the Mbangweni community in addition to depicting the relationships that exist among those actors. The circle sizes in the Venn diagram depict the amount of decision-making power attributed to each role player, citing the bigger the circle, the bigger the decision-making powers of an actor. The overlap between the circles depicts the relationship and interactions between the actors represented in each circle, i.e. the greater the overlap, the stronger the relationship represented and the greater the influence each role player has. The smaller the overlap, the weaker the relationship and influence between the role players.

- **Ranking Exercise**

A method of visually representing the major role players in the livelihoods of the Mbangweni community is a ranking exercise. This exercise is typically conducted with focus groups during

fieldwork and data collection (Mbatha, 2018). Through this exercise, this study was able to try and understand the community's perceptions of the key role players' influence and impacts on their rural livelihoods. The key actors, determined from oral history interviews and confirmed by the focus groups, were listed, and the community members were asked to rank each key actor by putting a number of stickers between zero (0) and (5) next to each role player. The number of stickers illustrated how much influence each of the listed entities is considered to have over the livelihoods of the community. If the focus group members placed zero stickers, this meant that the entity in question had very little to no influence over their livelihoods and five stickers meant that that entity had a large influence over their livelihoods. Furthermore, the focus group participants (FG_1 and FG_2) were then asked to give the stickers smiling faces or sad faces depending on whether they felt the entity in question has a positive impact or a negative impact on their livelihoods.

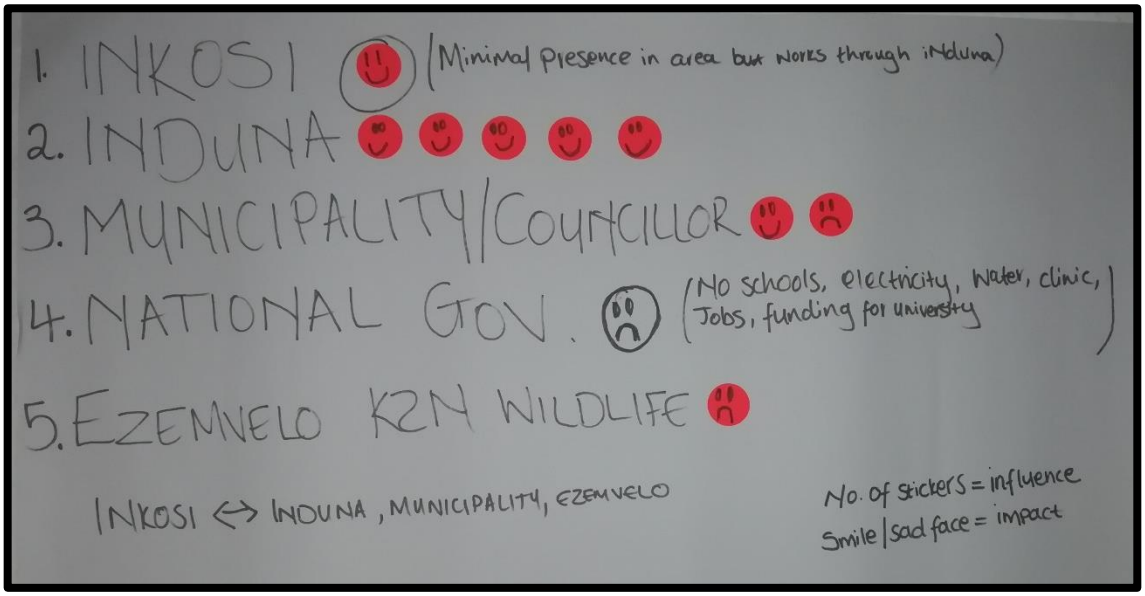


Figure 5. Ranking Exercise showing influence and impacts of key role players.

3.5 Data Analysis

The qualitative data that was collected during the visit to the study site was analysed to establish trends in the perceptions held by the various role players and stakeholders regarding the transboundary landscapes within which they exist.

3.5.1 Analysis of Data Using Geographic Information Systems (GIS) Software

Data analysis for this research project involved exploring, assessing and visually representing the perceptions of the transboundary landscapes held by the different entities that exist within and govern over these landscapes. To get a better understanding and visualization of these perceptions and perceived benefits and losses of the establishment of trans-frontier conservation areas, GIS software is

used to visually display the similarities and differences in perceptions between the different entities. This software, namely QGIS, is used to create layers that represent the community's perspectives on the transboundary spaces it occupies using the community's collectively drawn map (from the participatory mapping exercise). The software is also used to explore areas in which the perceptions held by community members is the same as or differs from those held by the adjacent nature conservation efforts and the local/traditional authorities. The similarities and differences perceptions of these landscapes are also compared between the different governing structures and the conservation institutions to establish where these structures and institutions fit and interplay with each other and where they may contradict and diverge from each other.

Geographical Information Systems (GIS) is a computer and software aided tool that can be used to map and visually represent spatial locations, features and distributions as well as spatial relationships between different objects and entities. It is used to map and calculate relative social values of different landscapes, natural resources as well as ecosystem services and uses, as perceived and defined by different stakeholder groups. The connections between social values, preferences and spatiality associated with various ecosystem services can be captured and quantified using GIS software through combining both physical attributes of entities as well as social contexts of an area, thus, making decision making processes more efficient and facilitating communications between decision makers and the different stakeholders and groups with varying interests in the problem or project at hand (Sherrouse et. al. 2011). GIS is a crucial for planning, development and (environmental) decision making as it has introduced the prospect of grass-root participation as opposed to the conventional top-down management methods. In the face of ever-changing socio-ecological systems complexities, PGIS and Public Participatory GIS (PPGI) have become vital for data collection and information generation. Despite this shift towards more public participatory data collection methods, GIS (software and technologies) has remained greatly focused on the characterisation and analysis of spatial locations as well as spatial features and their attributes (Vajjhala, 2005).

GIS, PGIS in particular, has the capabilities to formulate a variety of data and allows for the analysis of complex relationships (spatial or otherwise) between geographical entities or features. "As GIS have been extended to more complex and diverse applications, the resulting maps and output from the system have also become increasingly intricate, and arguably, divergent from the users and communities the technology was originally intended to serve. This divergence has led to critical assessments of the social implications and applications of GIS" (Vajjhala, 2005:2). There is an ever-increasing for PGIS as an opportunity to integrate local and indigenous knowledge with that derived from expert data, offering alternative ways of visualizing the suggested spatial relationships through incorporating local knowledge into spatial data use (Dunn, 2007; Cinderby et.al, 2008; Sherrouse et al, 2011). Furthermore, the community values mapping method presented in various literature provides a way of systematically

identifying and measuring values of the ecosystem and other livelihood factors based on local and indigenous knowledge. This knowledge, together with conventional GIS may assist in informing on past grievances and future decision making where transboundary landscape and ecosystem management is concerned (Raymond et. al., 2009).

Various cases of socio-ecological interactions have seen advances in the concept of environmental justice with calls for more public involvement and interactions or consultations with planners and local stakeholders whilst still maintaining the need for expert knowledge when making decisions. Furthermore, the lack of access to sophisticated technology and information creates a divide between information generation (by experts) and communication (to all stakeholders). Different experts compile and communicate information differently to different stake holders which often means that a gap is created between how the stakeholders– local communities, traditional authorities, local government actors and nature conservation areas– view and understand a certain issue or concept (Vajjhala, 2005). Participatory GIS is a tool that is used with the community's input and by the community members and other key informants to get on-the-ground perspectives. GIS software is then used to create standard, computer generated maps of these perspectives and relationships. It can, however, be said that "there is no "magic bullet" for integrating GIS and participatory mapping that addresses simultaneously the needs of all map-makers and map-viewers. There are multiple strategies for collecting participatory maps, integrating the information into GIS, and generating additional maps based on the elicited participatory information. Each one involves trade-offs" (Vajjhala, 2005:19).

Much like other methods of data collection and information generation, Participatory Mapping has its downfalls in the form of a time-consuming data collection process and difficulty in compiling the information efficiently thus making it difficult for the information to be used by decision makers (Dunn, 2007). Although Participatory GIS has its setbacks, it is seen as a very progressive tool that works to combine public, local and indigenous knowledge with expert knowledge to ensure true and wholesome information generation results. As Dunn (2007) notes, PGIS ensures that local and indigenous knowledges are integrated with expert knowledge and the inclusion of the social aspect of information provides a platform upon which alternative perceptions and realties may be represented and realized.

3.5.2 Thematic Analysis of Qualitative Data

The data that was collected from the interviews and focus groups is analysed to draw out conclusive information regarding the impact of transboundary landscapes on the rural livelihoods of the Mbangweni area and the perspectives held of the transboundary landscape. Thematic analysis is the chosen method of analysing the qualitative data.

Thematic analysis is described as the process of identifying patterns or themes within qualitative data. Braun & Clarke (2006) suggest that it is the first qualitative method that should be learned as "…it provides core skills that will be useful for conducting many other kinds of analysis'" (Braun & Clarke, 2006: 78). A further advantage, of this method of analysis is that, unlike many qualitative methodologies, it is not tied to a particular epistemological or theoretical perspective. This makes it a very flexible method (Clarke & Braun, 2013).

The goal of a thematic analysis is to identify themes, i.e. patterns in the data that are important or interesting and then use these themes to address the research or a particular issue. This is much more than simply summarising the data as a good thematic analysis interprets and makes sense of it (Clarke & Braun, 2013). This research project's qualitative data analysis follows Maguire & Delahunt (2017)'s thematic analysis method that emphasizes the importance of becoming familiar with the data, searching for themes in the data, reviewing the themes, defining the themes, and lastly, writing up the analysis (Maguire & Delahunt, 2017).

The thematic analysis method is used to unpack and analyse the data gathered from the desktop research, the interviews and the focus groups to try and draw out similar themes and discussion points relating to the conservation and transboundary landscape's impact on rural livelihoods in Mbangweni.

3.6 Research Ethics

As the study is conducted in consultation cooperation with communities in rural areas and under the authority of traditional leadership, I had to be introduced to the tribal authority or representative(s) of the tribal authority prior to proceeding with engaging with the community. This was done in order to gain the consent of the traditional leaders and the community leaders to undertake the research in each area. The research was conducted in a way that tried to ensure that the communities benefited from the research. A local community member was employed as an assistant and was paid to assist with coordinating the focus group discussions and oral history interviews. The results and findings of this research will also be fed back to the community when the study is completed so that local organizations, and the broader community, may gain a better understanding about issues relating to transboundary landscapes and their impacts on rural livelihoods.

Research ethical clearance had to be applied for and approved for the fieldwork to be conducted. This was done prior to the commencement of the fieldwork. The ethics approval/clearance was necessary as this study involved human participants whose participation in this study could have both positive and negative impacts on their livelihoods, employment and authoritative standing. The application was submitted and approved with conditions that included:

- No participants' faces could be displayed or in view if video recordings are taken.
- Permission to voice or video record must be granted prior to continuing with the interview.
- No names of any participants are to be used in the write up/reporting of the research project.
- All intentions of the project had to be disclosed prior to engaging with or collecting data from any participants.

This study used the personal opinions and experiences of the community members of Mbangweni community as well as participants from the nature reserves near the communities. This project attempted to not reveal the personal information of the participants. Where it was mandatory to explain this information or a part of this information, the participants were notified and given the choice to not participate in the interviews and/or focus group discussions. The study was aware that the sensitivity of the opinions and any fears of expressing honest opinions could potentially cause the participant to withdraw, to answer what they may perceive as the 'correct' answer or decline participation. However, the interviewees were assured that they're responses would remain anonymous, thus, encouraging more honest and open opinions and expressions from the participants. Each of the participants received a clear and full explanation of the aim and nature of the research and was offered the choice to remain anonymous throughout the study.

3.7 Study Limitations

The study observed certain limitations. Firstly, there were translation constraints of some of the terms used in this research e.g. "Transboundary Landscapes" and "Rural Livelihoods". As these terms were developed for use, primarily, in the English language, it was initially difficult to try and explain, simplify and then translate these terms into simple isiZulu terms that would not confuse the participants. However, this constraint was countered with my ability to fluently speak IsiZulu and therefore, I was progressively improving in being able to explain the terms as needed and it became easier to explain the terms and answer questions after a while. Secondly, the fieldwork was conducted a week after the national election period, and due to the high political contestations in this area, some of the community members may have been sceptical about the research and may have not wanted to answer certain questions especially where the local and traditional authorities' governing abilities were being questioned. This constraint was overcome by truthfully engaging with the community members and the representative of the traditional authority about the intentions of this study. Clearly explaining these intentions and answering, truthfully, each question that was posed allowed the participants to feel more at ease with answering the questions posed to them. Moreover, getting permission to conduct the research from the chief's headman prior to engaging with the community also put the community at

ease, knowing that the chief's headman would not allow outsiders with negative intentions to conduct any research in the area.

The final potential limitation was the use of a case study. The use of a case study as a research approach is criticized for posing limitations with regards to the validity and replicability of the data collected. It is contested and criticized as being as too reliant on observation and people's experiences to explain and understand why things are the way they are. Inconsistencies in people's observations and experiences is also named as a potential constraint of this approach, thus, making it difficult to replicate or verify the research findings (Lindegger, 1999).

3.8 Conclusion

This study has utilized qualitative data collection methods in order to obtain an in-depth and broad understanding of how the community of Mbangweni in northern KZN, the traditional authority leading the community, the local government as well as the nearby conservation areas perceive and understand the spaces they occupy in the transboundary landscapes. Key informant interviews, oral history interviews as well as focus group discussions were used to elicit qualitative and spatial information used to support and inform the study. The collected data is analysed using GIS software to determine where the perceptions of these entities converge and where they diverge. The next chapter provides the first part of the findings in the form of the background context for this study background and context of the Mbangweni area, borders and transboundary landscapes in South Africa, transboundary nature conservation in South Africa as well as the context of the nature reserves near the Mbangweni area.

Chapter 4: Study Background and Context

4.1 Introduction

It is important for this study to understand the historical and contemporary contexts of the area in which Mbangweni, Ndumo Game Reserve and Tembe Elephant Park are located. In trying to understand the history and current situation of this area, this chapter will look at the context of governing institutions that govern the area and how they govern the area. These institutions include the Tembe Traditional Authority, the uMkhanyakude District Municipality, the uMhlabuyalingana local municipality and the nature conservation institutions which include the Tembe Elephant Park as well as the Ndumo Game Reserve. Furthermore, this chapter will unpack the history and context of borders and transboundary landscapes in South Africa and, thus, how the Mbangweni area came to be a transboundary conservation area. The history and context of Ndumo Game Reserve (NGR) and the Tembe Elephant Park (TEP) as transboundary conservation sites will be explored. The chapter will then conclude by looking at and trying to understand the conflict between the people of Mbangweni and the nature reserves adjacent to them as well as why the Mbangweni community is contesting the proposed Ndumo-Tembe-Futi TFCA.

4.2 History of Mbangweni area and Context of Governing Institutions

Mbangweni is a rural area that falls under the authority of the Tembe Traditional Authority (successor to the Tembe Kingdom) that historically encompassed people on both sides of the South Africa-Mozambique border, stretching from the Lubombo Mountains to the Indian Ocean (Jones, 2006). Although its history is not particularly well documented or recorded, oral history states that groups of people and households that currently occupy Mbangweni are those who permanently settled on the South African side of the border when it was established. A few other rural communities and areas came to be from the settlement of people on the South African side of the border. Two of these areas are currently known as Bhekabantu and Ndumo (FG_2).

Mbangweni encompasses an area of approximately 45km². It is bordered on three sides by Ndumo Game Reserve (approximately 10 000 ha), Tembe Elephant Park (approximately 29 000 ha) and Mozambique. The Mbangweni area is accessible through a single-track dirt road that runs approximately 20 km south toward the main regional tar road (Jones, 2006). The national border that separates South Africa and Mozambique is officially demarcated and fenced but its porous nature allows for people and goods to flow in both directions in support of shared kinship, cultures, and co-dependent livelihoods with the communities of Mozambique. The Mbangweni area is situated on communal land under the leadership of the Tembe Traditional Authority (TTA). The traditional authority encompasses an area approximately 2240km² containing more than 35,000 residents in 42 separate izigodi (local

household groups/clusters). Mbangweni was part of the former semi-autonomous KwaZulu Bantustan (black homeland). All land is held in trust, but the Tembe iNkosi (chief) and the traditional iziNduna (sub-chiefs/chief's headmen) make most land-use decisions at the community level (Jones, 2006; FG1, FG2).

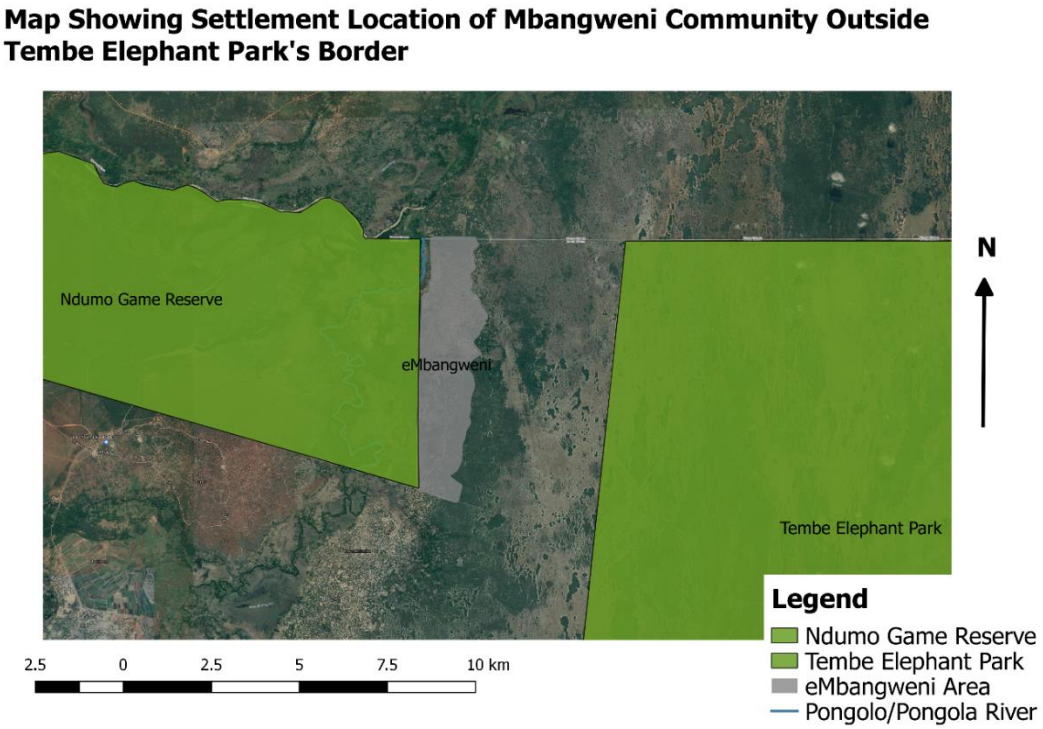
Most of the households and residents of Mbangweni pursue livelihoods dependent on subsistence agriculture, the sale of locally harvested natural resources, government grants (pension and childcare) and remittances from family members working in urban areas. Household expenditures include basic foodstuffs, transportation, healthcare (including traditional medicine), and school fees. There are minimal to no natural water sources, piped water, electricity mains, sanitation, or healthcare facilities in the community. Households in this area are typically have a small dry land agricultural plot within their homestead. Unfortunately, these agricultural plots bare low yields due to water scarcity and poor, sandy soils (Jones, 2006). In present day, this reliance on subsistent farming practices prevails. The area does not offer many other livelihood-creating opportunities beyond subsistent crop and minimal livestock farming activities (FG_1, FG_2).

Local fuelwood collection helps meet this rural area's energy needs. Mbangweni's social, nutritional, and economic livelihoods are directly linked to neighbouring Mozambique communities that Mbangweni once existed with as a single community (Jones, 2005). Several households have an additional agricultural plot on productive floodplain land that is located several kilometres inside Mozambique. Bush meat is actively traded throughout the Maputaland region, most of which likely comes from southern Mozambique. It is common for women from Mozambique to sell wild fish to women in Mbangweni, who then resell it at South African markets. The fish trade also supports the area's informal taxi economy, which transports the women and fish to regional markets located along the main regional tar road. Informal markets and shops located along the border provide access to goods and service for both countries. The taxi network in this area also supports the transportation of South Africans to the border markets and Mozambicans from the border to other shops and healthcare services located in South Africa in and around Mbangweni (Jones, 2005, 2006; FG_2).

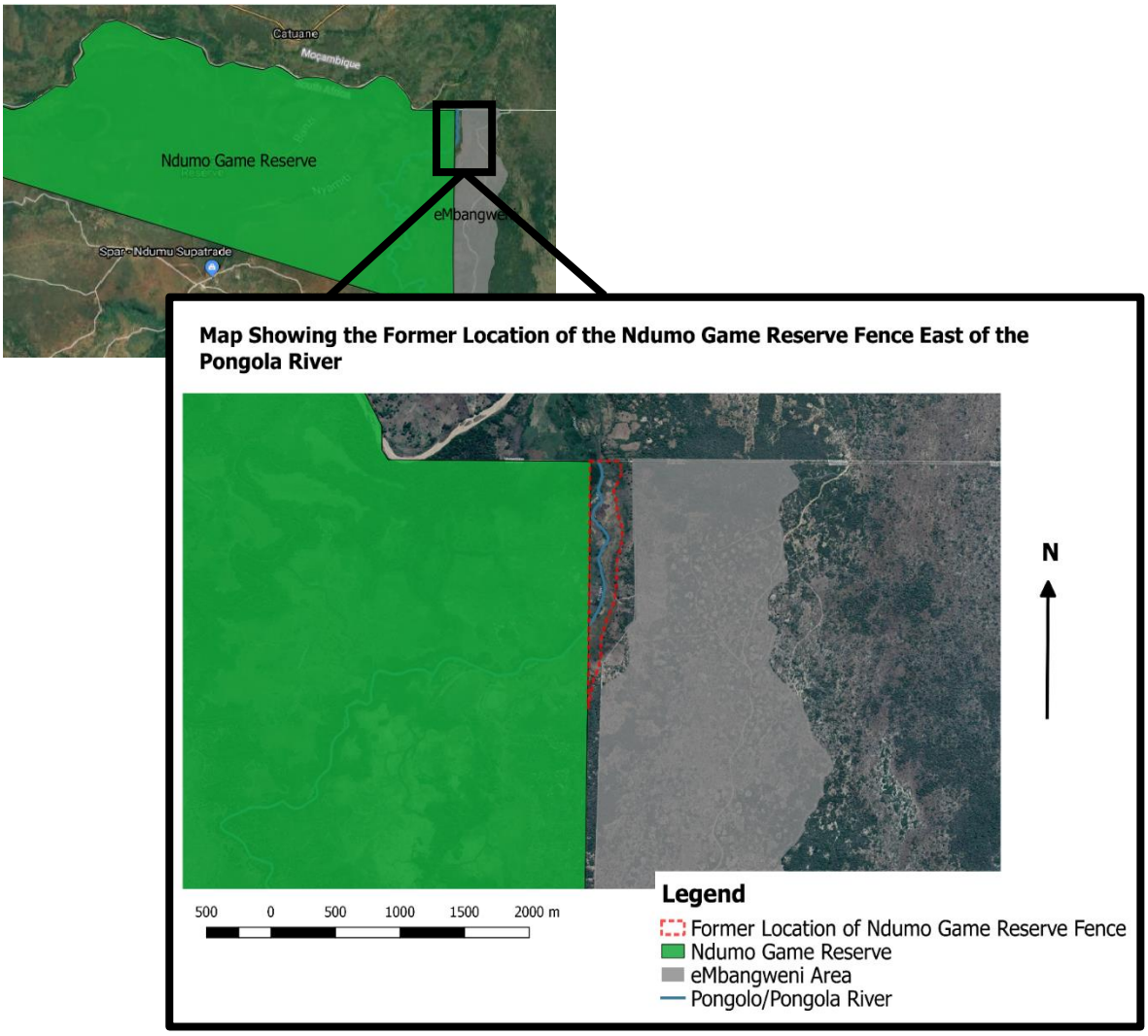
This area, like many other rural areas in South Africa has fallen victim to conservation-induced resettlement as the area in which Ndumo Game Reserve is located once belonged to the people under the Tembe Traditional Authority. This land would have, therefore, also belonged to the people of Mbangweni but the Mathenjwa traditional authority forcefully claimed and took over this land in the early 1920s as a means of rebelling against the Tembe traditional authority. The people under the authority of Mathenjwa were given this piece of land to occupy and use for their livelihoods without the consent of the Tembe traditional authority. The people of the Mathenjwa traditional authority sold this area, that they had requisitioned from the Tembe traditional authority, to EKZNW– the nature conservation agency that developed the Ndumo Game Reserve in the 1920s. This meant that the people

of Mbangweni had to remain on only one side of the Pongolo River as they were no longer free to occupy the land on both sides of the river (FG_2).

Established in 1924, the state-owned Ndumo Game Reserve, invoked racially discriminatory laws and practices between the 1940s and 1960s to forcibly remove local people (Tong, ca. 2002). Tembe Elephant Park, in contrast, was created during the late 1980s in consultation with the Tembe tribal authorities who agreed for some residents in the southern portion of the park to resettle outside the park's fence/boundary (Map 4 below). Post 1994, and following subsequent land restitution legislation, the Mbangweni community filed a land claim against Ndumo Game Reserve for all land east of the Pongola River located inside the park (Map 4below). The community maintained that not only did they regularly access this land for natural resources, but some community members and/or their ancestors had resided and were buried on the land (Jones, 2006).



Map 4. Map showing where people of Mbangweni had been relocated to after the Tembe Elephant Park had been established.



Map 5. Map showing piece of land that was reclaimed from the Ndumo Game Reserve by the Mbangweni community.

4.2.1. Socio-economic context of Mbangweni area

Mbangweni is located within the uMkhanyakude District Municipality and the uMhlabuyalingana Local Municipality. The uMkhanyakude District Municipality, located in the far Northern region of the KwaZulu-Natal, is the 2nd largest district in the province (Ezemvelo KZN Wildlife, 2018). A key function of the District and Local municipality in this area is the promotion of tourism. The STATSA 2011 Census indicates that the population for the district is made up of more than 128 000 households and more than 625 800 people with over 33 800 households and 156 700 people residing within the Umhlabuyalingana Local Municipality's boundaries (StatSA, 2011). At the time that this census was conducted, the unemployment rate was estimated at 43% of the total population. This district is said to be poverty stricken.

According to the Community Survey (2016), the Umhlabuyalingana local municipality is home to an estimated population of 172 077 people and average household size of 5 people. It is made up of 99% Black/African population. The population in this municipality is very young as approximately 41% of

the people are younger than 14 years and approximately 55% are between the age of 15 and 64 years and only 4% are older than 65 years. The language spoken by most of the people in this municipality is IsiZulu (StatSA, 2011; Community Survey, 2016). The 2011 national census 2011 revealed that over 81% of the group of people aged 5-24 years were attending school and only 19% were not attending school. Approximately 30% of the population aged 20 and above had no schooling, 4,5% had higher education and approximately 22% had matric. Most of Umhlabuyalingana Municipality consists of very low intensity and sparsely populated rural settlements, however, Manguzi and to some extent Mbazwana, Mseleni and Skhemelele are exceptions to this as they are fast emerging as variably concentrated urban centres. The gender profile of the Umhlabuyalingana is typical of the trend in most other local municipalities in KwaZulu-Natal i.e. there are generally more females (more than 91 000) residing in the area as opposed to males (just over 80 000). However, the difference is not significant (Community Survey, 2016; Umhlabuyalingana Local Municipality, 2018).

Mbangweni is a rural area with a total population of just over 1300 people and an approximated population density of 123 persons/km^2. This rural area is occupied by approximately 250 households. It is estimated that only about 2% of these households have piped water inside the dwelling, less than 0.3% have electricity and only approximately 1.2% have a flush toilet connected to the sewerage system. The economic situation of this area reflects that approximately 10% of the population earns R0 per annum and only 2.4% of the population earns between R76 000 - R153 000 per annum (StatSA, 2011; Community Survey, 2016).

With subsistence agriculture as the main land use in this area, the harvesting of reeds and medicinal plants has become commercially significant. Extensive exotic plantations (Eucalyptus plantations) have also emerged as having significant economic value to the communities of this district. Tourism is seen as one of the contributing solutions for these challenges and is seen as the most important growth sector in the district's economy. Ecotourism ventures and the hospitality trade in the area provide significant support to a large portion of the local economy (Ezemvelo KZN Wildlife, 2018).

One of Umhlabuyalingana's focal points is the biodiversity that inhabits an ecosystem landscape that has retained ecological functionality. This is countered by poverty and a high dependence on natural resources. Opportunities for eco-tourism and the incorporation of the local community as custodians and beneficiaries of conservation and eco-tourism are desperately sought by the residents of the district, including those who live in Mbangweni. The district also faces challenges of low water availability and, therefore, water management and water conservation remain as crucial issues (Ezemvelo KZN Wildlife, 2018). Moreover, unemployment, inequality and poverty remain the major economic challenges in the district. The close link and overlap between these three social issues mean that social and economic interventions from government and other developmental partners should directly and indirectly tackle these issues (uMkhanyakude District Municipality, 2013) and, in addition, specifically target women as

the Umhlabuyalingana local municipality area is home to more women than men (Umhlabuyalingana Local Municipality, 2018).

4.2.2 History and Context of Tembe Traditional Authority

The institution of traditional leadership in South Africa – particularly the traditional leaders (chiefs) and the practices governing succession to the office of chieftainship – has significantly changed from what it was in the distant past. During the periods of colonial subjugation, segregation and apartheid, the roles and functions of traditional leaders and traditional practices governing succession to the chieftainship were distorted and lead to the legitimacy of the institution itself becoming questionable. For instance, the way legislation was introduced by successive white governments in South Africa during the 20th century encouraged the erosion of the powers of chiefs and to make them government functionaries responsible for the enforcement of unpopular policies and laws reference. This role of *amaKhosi*[5] (Chiefs) in the 20th century diminished their legitimacy in the eyes of their followers. Moreover, powers were granted to successive white administrators to appoint and depose amaKhosi, as well as to create chiefdoms at will. This became a tool for colonial and apartheid administrations to interfere in the internal operations of chiefdoms, and create new chiefdoms, destroy others, as well as depose and replace uncooperative chiefs. This resulted in various new ruling lineages being created where none existed before, others were destroyed. Some ruling lineages were deprived of their historical status while other 'inferior' lineages were raised to the chieftainship in their stead, giving rise to disputes among communities over the legitimate ruling lineage (HSRC, 2011).

The present African inhabitants of the area, also referred to as the Tembe-Thonga, have a rich oral history and culture relating to their intimate relationship with the environment and traditional authority spanning many centuries. The African societies of south-east Africa emerged locally from long established communities of diverse origins and diverse cultures and languages. It is said that the Tembe people who form a part of these African societies came from Karanga, Zimbabwe to establish their authority over the people of south-east Africa. This statement is countered by other findings that claim that the Tembe people emerged locally (Wright & C. Hamilton, 1989 and Kuper, 1997). Chief Tembe and his followers gradually established their authority over the people who lived in this hinterland including the area covered by the present Tembe Elephant Park. Due to the abilities of their strong and charismatic leaders, the Tembe-Thonga remained a unified chiefdom and gradually extended their influence. (Ezemvelo KZN Wildlife, 2018).

The influence of the Tembe-Thonga chiefdom extended all over the area known as Maputaland. Maputaland is a region of Southern Africa located in the northern part of KwaZulu-Natal in South

[5] amaKhosi means 'Chiefs' in the isiZulu language (*iNkosi* is the singular noun of amaKhosi)

Africa between Eswatini and the east coast of South Africa. Maputaland is bordered by the Lubombo Mountains of Eswatini in the west and the Indian Ocean in the east. It covers an area of about 10 000 km^2 and stretches approximately from the town of Hluhluwe and the northern section of Lake St. Lucia to the South Africa/Mozambique border, or beyond to Maputo in Mozambique (Matthews, 2006; SiyabonaAfrica.com, 2017). The southern part of Maputaland was annexed by the British Imperial government in 1897 as part of Zululand, which included the expanded Zululand in Natal. In 1910, the entire southern region of Maputaland fell under the Union of South Africa. For more than hundred years, starting from 1896 to the present, the Tembe Royal family has ruled Maputaland as the legitimate family. After 1994 with the end of apartheid ruling in South Africa, some followers of the Tembe Dynasty began to question the Royal family's legitimacy. The Tembe royal family (also referred to as the Maputa family) ruled Maputaland for more than hundred years. With the support of colonial powers and apartheid government, this reign lasted into the 1980s with minimal issues and challenges. After 1994, the Maputa family then faced challenges from its own followers (especially the Makhuza clan) who began to question the legitimacy of the royal mandate (Mthethwa, 2002).

The area of disputed Maputa and Makhuza power is in a region alternatively known as Tongaland, Tembe-Tongaland, and Maputaland. It was also called KwaNgwanase after the chieftainship of the Maputa Royal family. The area is currently inhabited by several clans who owe allegiance to one of the two Tembe families (Maputa and Makhuza). The two Tembe families originally lived as one family in the northern part of Maputaland, now located in Mozambique. Both families moved to southern Maputaland at different times. According to oral testimony, the house of Makhuza moved to present-day Maputaland in the early 19th century, while the house of Ngwanase arrived at the end of the 19th century. Oral evidence, from current local occupants of this region, also suggests that when Ngwanase moved to the southern part of Maputaland, Makhuza ruled this region. There was a conflict between the two families in the late 19th century, as both families wanted power and possible access to followers' tributes. The stronger house of Ngwanase manoeuvred to become the ruling family. The political boundaries between the two Tembe families are not clearly defined for as there is no physical boundary between the territories and because the African conception of physical boundary is associated with occupation of territory (Mthethwa, 2002).

Rural areas like Mbangweni are demarcated by the oversight of several of the chief's headmen who counsel followers/residents, collect tribute on behalf of the two Tembe families and play a crucial political role in Maputaland. Many headmen are relatives of the two Tembe families, likewise, there are some headmen who are not related to either Tembe families. Some have acquired headman positions by inheriting these positions from their forefathers who held similar positions based on meticulous and often conflicting processes of succession (Mthethwa, 2002).

Protected conservation areas within the Tembe Traditional Authority's boundaries are said total more than 24% of the land. These conservation lands belong to the ruling traditional authority but are managed as conservation in accordance with negotiated agreements by the provincial conservation agency, Ezemvelo KwaZulu-Natal Wildlife (EKZNW). However, Ndumo Game Reserve land is owned by the state and the communal land on all but the eastern side of Ndumo belongs to the Mathenjwa Traditional Authority (Jones, 2006).

4.2.3 Context of the Local/District Municipality

Umhlabuyalingana local municipality, in the North-Eastern confine of KwaZulu-Natal, is one of the six local municipalities that constitute the District of Umkhanyakude. The Municipality spreads for approximately 3600 km^2 and is commonly classified as rural. It is estimated that approximately 60 % of the municipal area falls under Ingonyama Trust ownership with four tribal councils (Tembe, Mashabane, Mabaso and Zikhali) as the custodians of the land and the remaining 40% consisting of commercial farms and conservation areas.

Legislature mandates municipalities to conduct municipal planning within their areas for cohesive service delivery (Section 152, Schedule 4, part B and Schedule 5, part B of the Constitution Act 108 of 1996) and regulate land development in their areas of jurisdiction in terms of the new KZN Planning and Development Act (Act No. 06 of 2008). Furthermore, the recently adopted Provincial Growth and Development Strategy also require municipalities to achieve certain goals to contribute in the socio-economic objectives of the entire province of Kwa-Zulu Natal. Unfortunately, Umhlabuyalingana as one of the most rural municipalities, very little to no town/development planning is duly practiced or implemented (Bukhosini & Zikhali, 2018).

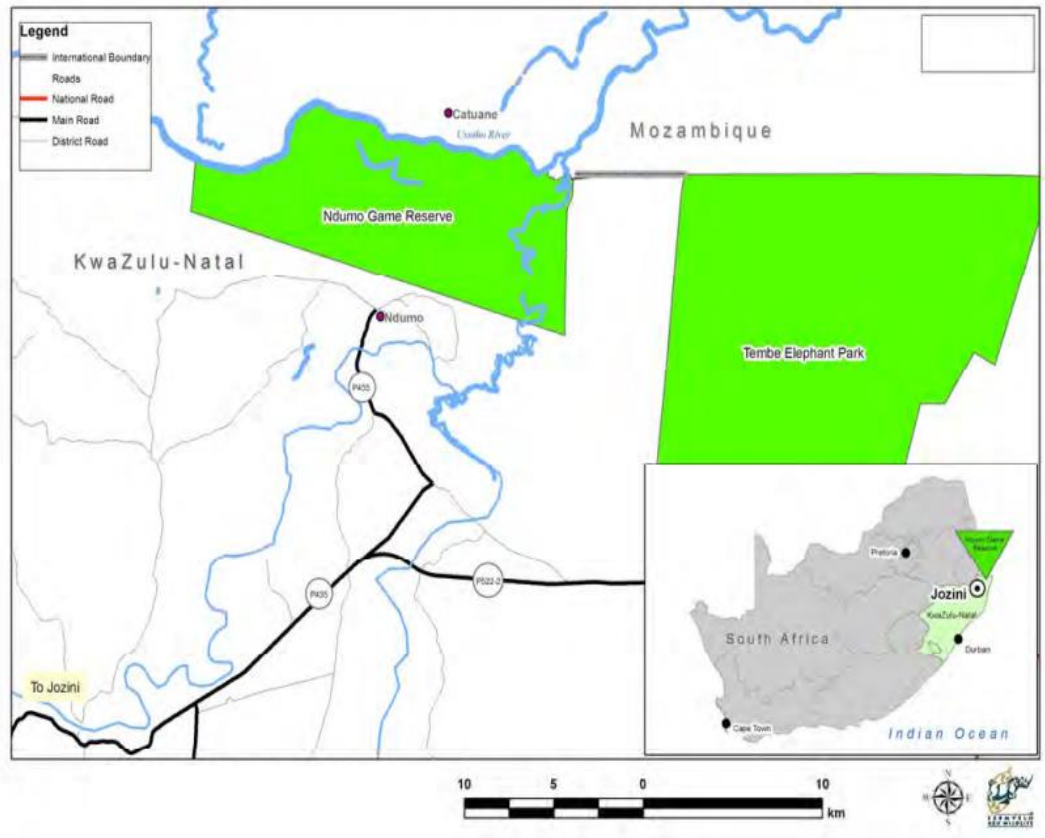
As many rural municipalities in South Africa, Umhlabuyalingana was established at the time where un-planned small rural towns had already emerged (Bukhosini & Zikhali, 2018). To combat the issues that arise from such rural areas, as its key function and purpose, the local municipality must develop an Integrated Development Plan (IDP). An IDP is one of the key mechanisms for Local Government to cope with its new developmental role. Furthermore, it seeks to facilitate strategic decisions on issues of Municipal importance, such as Land Use Management Systems, Local Economic Development and Institutional transformation in a consultative and systematic manner. The Municipal Systems Act (MSA), which provides a framework for the preparation of IDPs recommends that, once in place, each IDP must be reviewed annually to reassess and re-evaluate the Municipality's development priorities and challenges and to accommodate new developments in local government processes (Umhlabuyalingana Local Municipality, 2017). The local municipality's main role is to respond directly to issues facing the area and its communities rendering local government services efficiently and effectively. The municipality also works to contribute directly and indirectly to the attainment of other

outcomes, particularly those dealing with economic development, infrastructure development, rural development and environmental management. Therefore, alignment with the relevant sector frameworks and programmes across the spheres of government is critical for the municipality's main goals and objectives (Umhlabuyalingana Local Municipality, 2017).

In trying to address the community's issues, the local municipality must adopt method public participation methods. These are important to determine the exact needs that exist in the communities in relation to the developmental priorities during the public meetings and information gathering. Umhlabuyalingana Municipality utilises the IDP Representative Forum (IDP RF)–A forum that represents all stakeholders and key interested and affected parties, Media and the Umkhanyakude and Umhlabuyalingana Website as mechanisms for public participation when developing its IDP and setting procedures to address community issues (Umhlabuyalingana Local Municipality, 2017). It is then important that the implementation of the IDP and the measurement of performance of the IDP strategies and projects must align with the performance management system of the municipality and equip its leaders, managers and workers, as well as all other local stakeholders (community members), in decision-making, monitoring and reviewing its achievements in integrated development planning (Umhlabuyalingana Local Municipality, 2017).

4.3 History and Context of the Tembe Elephant Park and Ndumo Game Reserve, the Ndumo-Tembe-Futi TFCA and the conflict with the people of Mbangweni

4.4.1 Ndumo Game Reserve



Map 6. Ndumo Game Reserve Locality Map (EKZNW,2009).

Ndumo Game Reserve (NGR or Ndumo), a small game reserve located in far northeast Maputaland, is best known for its magnificent bird life as well as game species such as nyala, bushbuck, impala, black and white rhino, hippopotamus and crocodiles. These animals roam the reserve's wetlands and pans, thick bush, savannah and extensive forests. It is situated on the border with Mozambique where the Pongola River joins the Great Usutu River and adjacent to the Tembe Elephant Park. Ndumo is the South African component of the Lubombo Transfrontier Conservation and Resource area. The Ndumo Game Reserve is a registered Ramsar Site and comprises a variety of ecosystems, including floodplain pans, wetlands, reedbeds, savanna and sand forest (Ezemvelo KZN Wildlife, 2018).

4.4.1.1 History of Ndumo Game Reserve: Origin of the game reserve's name

Ndumo Game Reserve got its name from iNduna Ndumo Tembe. He was one of two iNdunas who originally controlled the land on which the Game Reserve was established. Ndumo was first proclaimed as Nduma Game Reserve in 1924 and was later changed to Ndumu– names that are both anglicized versions of Ndumo. The name was officially changed to the Ndumo Game Reserve in 1989 by the then KwaZulu Government. The name for the village just south of the Game Reserve and the Game Reserve itself is still indicated incorrectly as Ndumu on many maps and brochures (Ezemvelo KZN Wildlife, 2009).

4.4.1.2 Previous Land Use

Ndumo Game Reserve was extensively inhabited by the Ndumo community prior to and even until quite sometime after proclamation. Subsistence agriculture was mainly practiced throughout the area but predominantly on the Usuthu River floodplain and to a lesser extent on the Pongolo River floodplain and pan systems where fishing also took place. Although various aspects of the conservation history of NGR are recorded in the Tembe-Ndumo Management and Development Plan – 1993 Draft– the long conservation history of the NGR is unfortunately fragmented and incomplete. This 1993 (draft) plan references the fact that although the NGR was proclaimed in 1924, there were still about 300 local people staying on the Game Reserve with about 600 cattle in 1935. During this time, the Natal Provincial Administration planned to evict the amaTonga people living within the park. The eviction was considered necessary as people were seen to be having a negative impact on both the vegetation and the wild animal population (Ezemvelo KZN Wildlife, 2009).

4.4.1.3 Cultural Heritage

The cultural heritage of Ndumo Game Reserve, and the larger Maputaland, remains largely unexplored. Archaeologists and amateur enthusiasts have historically made efforts to survey portions of the area. Apart from archaeological sites, the Maputaland (including NGR), is well known for its living heritage values amongst local communities. These living heritage sites are linked to the rich and diverse natural

features of the environment and include the Mahemane Bush, the pan systems and areas associated with historical and traditional fishing techniques. In addition, the area has rich oral histories, myths and legends about early African settlement and culture (Ezemvelo KZN Wildlife, 2009).

4.4.1.4 Socio- Economic Context

Much of the population surrounding NGR are poor, rural and previously disadvantaged South African communities. Subsistence crop and cattle farming are the dominant land uses and livelihood activities in this area. The wetland upstream of the Game Reserve on the Pongola River floodplain is extensively utilised for agriculture. Large-scale subsistence and artisanal fishing are important livelihood activities that are supported by the Pongolo River and its wetlands which are replenished from the fish breeding grounds protected within NGR. Ecotourism initiatives and hospitality trade in the area also provide significant support to the local economy (Ezemvelo KZN Wildlife, 2009).

4.4.1.5 Institutional Arrangements

NGR Management Authority Ezemvelo KwaZulu-Natal Wildlife (EKZNW) is the main Management Authority responsible and accountable for the Ndumo Game Reserve. EKZNW is responsible for reporting on the management of the Game Reserve thus ensuring co-ordination of matters affecting NGR through the relevant provincial departments, District and Local Municipalities (Ezemvelo KZN Wildlife, 2009).

4.4.1.6 Legislation Guiding the Administration of Ndumo Game Reserve.

Ndumo Game Reserve is a protected area in terms of the National Environmental Management: Protected Areas Act, 2003 (Act No. 57 of 2003 [NEMPAA]). Its administration is also guided by other legislature including the Conservation of Agricultural Resources Act, 1983 (Act No. 43 of 1983), several variations of National Environmental Management Acts as well as nature conservation management acts. EKZNW protected area regulations are enforced in accordance with Section 15 of the Nature Conservation Ordinance, 1974 (Act No. 15 of 1974) read together with the KwaZulu-Natal Nature Conservation Management Act, 1997 (Act No. 9 of 1997) (Ezemvelo KZN Wildlife, 2009).

4.4.1.7 Land Tenure and Land Claims

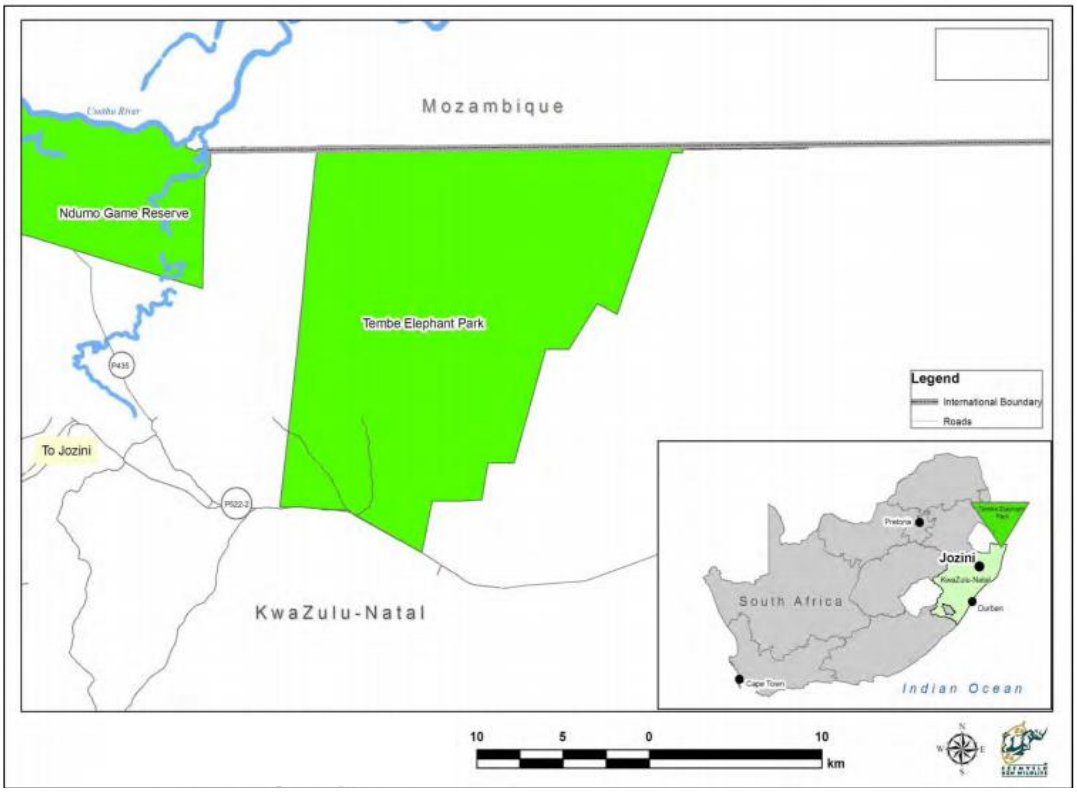
NGR was originally declared as a game reserve in 1924 on Mathenjwa and Tembe communal lands under the leadership of their respective traditional authorities. Ingonyama Trust Board was established in 1994, as a land-holding legal entity on behalf of these traditional authorities. In 1998, the Mathenjwa community (west of Pongolo River) and Tembe community (east of Pongolo River) lodged a land claim against the communal land that makes up the Game Reserve, in terms of the Restitution of Land Rights

Act No. 22 of 1994. This claim was successful, and a Settlement Agreement was signed in 2008. However, in accordance with the Restitution of Land Rights Act, the claimed land can only be transferred in title to a legal entity representing the originally dispossessed or their direct descendants. Presently, the claimants' legal entities are in the process of being formed. Once they have formed, the Ingonyama Trust Board will transfer ownership to the claimants' legal entities. An important condition for the transfer of land, however, is that claimant landowners will not physically occupy the land and the land-use shall not be altered and will remain a conservation area existing under the management of the existing management authority– EKZNW (Ezemvelo KZN Wildlife, 2009).

4.4.1.8 Conflict with local communities

In the beginning people occupying the area around the NGR did not have a problem with nature conservation. People were told that Natal Parks Board (NPB) had come to teach people to look after the nature. Soon after, however, the NPB began to prohibit people from using natural resources. Rangers were introduced and local people were not allowed to remove seafood such as mussels. NPB also stopped people from fishing and cultivating the only fertile areas located along swamps. The locals became worried when these areas were closed to them as these fertile grounds were important for their survival. The people in Maputaland had long been suspicious of nature conservation from the time when NPB began to operate in this region (Mthethwa, 2002). The suspicions and resistance have persisted and spread across the region even in the present-day Maputaland.

4.4.2 Tembe Elephant Park



Map 7. Tembe Elephant Park Locality Map (EKZNW, 2018).

Tembe Elephant Park (TEP) was first declared in 1983 on communal lands under the leadership of the Tembe Traditional Authority. The park largely encapsulates the area roamed by the last free ranging elephant in KwaZulu-Natal. Originally, its primary purpose was the protection of the lives and property of the Tembe people from injury or damage by elephants. Although, initially, the park was not proclaimed primarily for conservation but to ensure the safety of the local communities from elephants, its history regarding conservation in South Africa is significant. The park covers an area of approximately 29 000 ha and is situated in the northern part of the KwaZulu-Natal province in South Africa, on the border with Mozambique. Its northern boundary is the international South Africa/Mozambique border, the eastern boundary borders on community wards of the Tembe Traditional Area. TEP is core to the conservation area forming part of the Ezemvelo KZN Wildlife protected area network and the Combined Lubombo Conservancy-Goba and Usuthu-Tembe-Futi Trans-Frontier Conservation Area (previously the Usuthu-Tembe-Futi TFCA). TEP also provides protection to a portion of Sand Forest, the Maputaland Wooded Grassland and its associated biodiversity. TEP also contributes to the protection of endangered, rare and endemic plant species (Ezemvelo KZN Wildlife, 2018).

4.4.2.1 History of Tembe Elephant Park

The Tembe Elephant Park got its name from the Tembe people, specifically iNkosi Mzimba Tembe and the last free ranging elephant population in KwaZulu-Natal. History of conservation in Tembe Elephant Park Maputaland is known to have been inhabited since the early Stone Age period. However, little has been documented on the extent of the previous agricultural and other use of the area. The TEP area has a history of being sparsely populated. Furthermore, water resources were not abundant or were too saline for cultivation while wild elephants (and lion up until the 1900s) have always roamed the area and, occasionally, raided crops in homestead agricultural plots. These combined factors most likely prevented further densification of the local community in the TEP area. Up until the establishment of the Ndumo Game Reserve, the area had always been sparsely inhabited by the local population who practiced subsistence agriculture on a limited scale, hunted and harvested natural resources in the area. No intensive / commercial agriculture was ever practiced here (Ezemvelo KZN Wildlife, 2018).

Tembe Elephant Park's elephant population was the last naturally free roaming elephant of KwaZulu Natal. Negotiations for the creation of a protected area were initiated in 1977. An experimental electric fence was erected along the south side of the tar road and elephants were driven to the north of it in 1983. Based on its effectiveness, it was decided that the elephant population of the Sihangwane Forest could be confined to the area of the proposed reserve bringing the elephant / human conflict to an end. The willingness of the iNkosi (Tribal Chief) and community to set aside an area big enough and with sufficient resources and water for the elephant determined the success of this initiative. Eventually, Chief Mzimba Tembe allocated land to establish a Game Reserve in the Tembe Tribal Ward and Tembe

Elephant Park was proclaimed in 1983. To contain the elephants, TEP was fenced with electric and game fencing, which was completed in 1986. This was done on three sides leaving the northern border with Mozambique open. Initially, the communities were sceptical, but the electric fence proved to be a success and to date the fence has been effective in preventing further crop damage and attacks against community members by elephants. To control the number of poaching and animal injuring incidences, it was decided to close the northern boundary of the Park with Mozambique. This fence was completed at the end of 1989. Unfortunately, this led to the split of the Maputaland elephant population as the link with the floodplains and the northern Maputaland Coastal Plain was cut (Ezemvelo KZN Wildlife, 2018).

4.4.2.2 Institutional and administrative framework for the management of Tembe Elephant Park

The KwaZulu-Natal Nature Conservation Board, established in terms of the KwaZulu-Natal Nature Conservation Management Act No.9 of 1997, appointed the Agriculture and Environmental Affairs as the management authority for all provincial protected areas in KwaZulu-Natal. The Board's implementing agency is Ezemvelo KZN Wildlife (EKZNW). Management of Tembe Elephant Park is undertaken in accordance with relevant legislation and the management policies of EKZNW, which includes a commitment to maintain the character and ecological, cultural and aesthetic integrity of the site.

4.4.2.3 The legislative basis for the management of Tembe Elephant Park

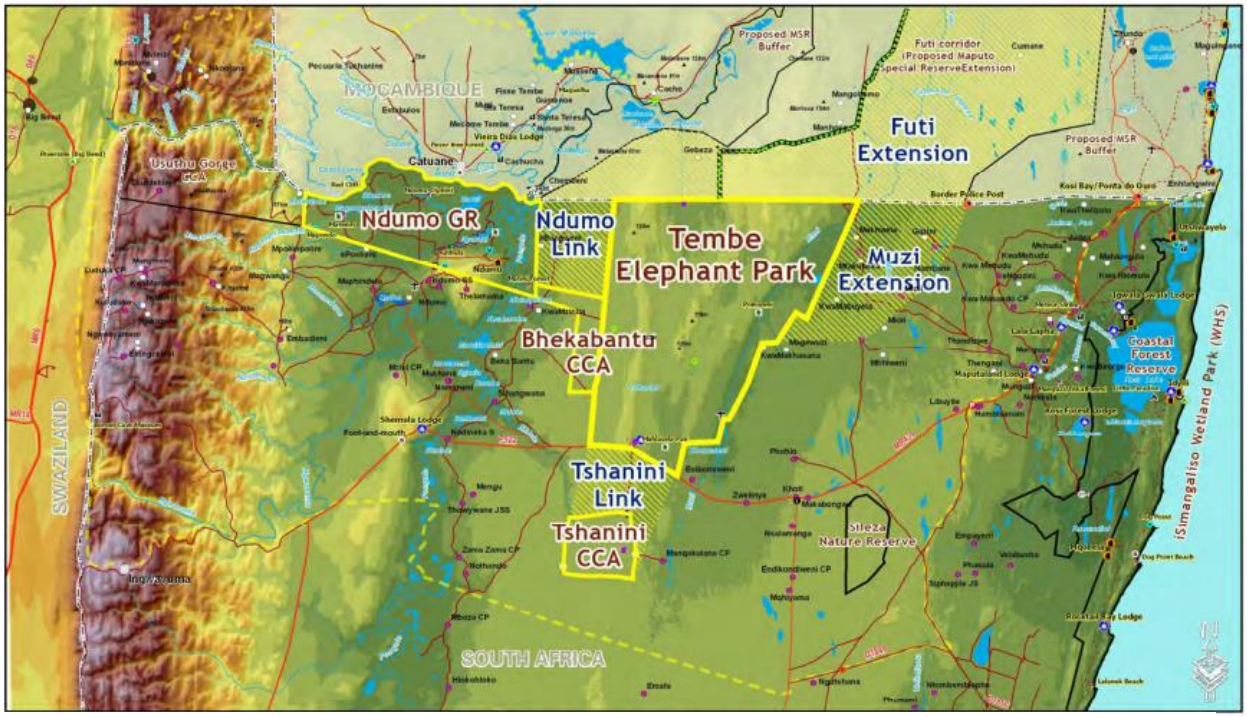
A large body of legislation that is relevant to the management of Tembe Elephant Park exists. The primary legislation guiding the management of protected areas is the National Environmental Management: Protected Areas Act (No.57 of 2003). This Act establishes the legal basis for the creation and administration of protected areas in South Africa, as its objectives include provisions for the protection and conservation of ecologically viable areas that represent South Africa's biological diversity and its natural landscapes. The Act sets out the mechanisms for the declaration of protected areas and the requirements for their management (Ezemvelo KZN Wildlife, 2018).

4.4.2.4 Historical Conflict with locals

1982 marked the formation of the KwaZulu Bureau of Natural Resources (KBNR) as a conservation body or department within the former KwaZulu government. The KNBR initially identified areas for nature conservation in Zululand. Like several other reserves in South Africa where people have been relocated/removed for nature conservation, the local people in Maputaland occupied areas that KBNR identified as suitable for conservation. The need to extend conservation by the KwaZulu government required removal of people from their lands. This removal came with the justification of nature

conservation bringing economic development and creating job opportunities for local people. Unfortunately, the KBNR's approach to nature conservation became worse than NPB as it prohibited the use of natural sources and removed locals from the land they had used for their livelihood over the decades. In 1983 the KBNR established the Elephant Park at Sihangwane area in Maputaland. This park was constructed 25 kilometres east of Ndumu game reserve and between the Pongola and Muzi Rivers. Wild elephants had already been living in this area from the pre-colonial period (Mthethwa, 2002; FG_2). The KBNR and the Tembe tribal authority discussed the construction of the Tembe Elephant Park. Its establishment led to the removal of thirty-two homesteads in this area. People who were removed from their land were promised compensation, which included new land, a water supply and money that they could use to build new houses. It was also agreed that members of the relocated homesteads were going to have access to the natural resources inside the park. These resources included reeds from the Muzi River, which provided material for building houses, and the palm trees that supplied the main ingredients for the popular palm wine brewed and sold by most people in the area. Additionally, people were promised to receive 25% of the revenue produced by the park through tourism. Unfortunately, local people lost vast grazing and subsistence farming land on which they previously had customary rights. This land could neither be replaced by the 25% benefit from the park nor by any form of compensation. There were many problems after people were relocated as the KBNR had not fulfilled its promises. Currently, some people still express their disappointment as they received no benefits, or any form of compensation as promised by KBNR (FG_2). Once people were removed, the KBNR put restrictions on people's access to resources inside the park. Moreover, TEP employed people who were not members of the local community, even though KBNR made promises that job opportunities would be given to local people. This situation created a negative attitude against the KBNR and the KwaZulu government from the relocated families and the communities of Maputaland at large (Mthethwa, 2002). These grievances persist in the present-day Maputaland and especially in Mbangweni (Mthethwa, 2002; FG_2; OH_{1-10}).

4.4.3 Plans for NTF TFCA and other future expansion opportunities



Map 8. Future Expansion Opportunities Map (EKZNW, 2009).

Establishment of Transfrontier Parks

In 2000, five protocols on the establishment of the Lubombo Transfrontier Conservation and Resource Area were signed. It consisted of five distinct Transfrontier Conservation Area projects including the Usuthu-Tembe-Futi Transfrontier Conservation Area (TFCA). The Usuthu-Tembe-Futi TFCA is made up of the Maputo Special Reserve in Mozambique (formerly known as Maputo Elephant Reserve) as well as Tembe Elephant Park and Ndumo Game Reserve in South Africa. The intended linkage of Tembe Elephant Park to Ndumo Game Reserve was through a narrow corridor of communally owned land known as the Mbangweni community area. This protocol considered the linkage of the South African conservation areas to Maputo Special Reserve through a corridor of land along the Futi River. The proposed area was predicted to consolidate a conservation area of approximately 2 000 km^2 (Ezemvelo KZN Wildlife, 2018). A fenced-off corridor of about 50km long and 20km wide would be created to link the Maputo Special Reserve with the Tembe Park (Marshall, 2008). Additional Community Conservation Areas (CCAs) include the Usuthu CCA situated on the western boundary of Ndumo Game Reserve. This was supported by the Trilateral Commission and facilitates the inclusion of Swaziland into the TFCA project scope (Ezemvelo KZN Wildlife, 2009; Ezemvelo KZN Wildlife, 2018).

Transboundary nature conservation initiatives that have been implemented and proposed include: the Ndumo Link which links the TEP to the NGR and both of these to the Maputo Special Reserve via the Futi Corridor, the Bhekabantu CCA, the Tshanini Link which would link TEP to the Tshanini CCA and, finally broadening TEP through the creation of the Muzi extension which would also be linked to the Futi corridor (Ezemvelo KZN Wildlife, 2009).

4.4.4 Conflict with Mbangweni local people

Ndumo Game Reserve has suffered much destruction through human encroachment from its eastern boundary down to the Pongola River which traverses the reserve. This destruction has reportedly been ongoing for a few years and came about after a land claim by the nearby Mbangweni community. This boundary is a known long-standing political issue. The 2000 land claim is said to have been settled, but apparently was not settled correctly. The fence along this eastern boundary, was taken down by the Mbangweni community as they faced this conflict with the game reserve (Jolly, 2014).

Members of Mbangweni historically resided on land that is now inside Ndumu Game Reserve ((Jones, 2005). Established in 1924, this game reserve forcibly removed local people. The Tembe Elephant Park, on the other hand was created in consultation with the Tembe tribal authorities who agreed for some residents in the southern portion of the park to resettle outside the soon-to-be-fenced park. After democratization in 1994 the Mbangweni community filed a land claim against Ndumu Game Reserve for all land east of the Pongola River inside the park. The managing conservation agency, Ezemvelo KwaZulu-Natal Wildlife, acknowledged that Mbangweni livelihoods were dependent on floodplain resources inside the park, but denied that community members ever resided on Ndumu land. The land claim was settled in 2000. The settlement acknowledged the Mbangweni community as rightful owners of the land and restored full tenure and ownership to the community. However, the settlement rested on the continued fencing of the land for conservation under the management of Ezemvelo KwaZulu-Natal Wildlife (Tong, ca. 2002). An agreement for the negotiation of a separate management agreement to determine future access rights, revenue sharing, and possible co-management was reached. The community was also afforded the right to pursue the excision of a small piece of land from Ndumu Game Reserve to convert to agriculture in exchange for a portion of community land to become conservation (Tong, ca. 2002).

As the land exchange and management agreement continue to be negotiated, mistrust and animosity between the community and outside institutions continue to escalate. Traditional authority in Mbangweni claims to have been unaware that past oral agreements, as well as additional short-term incentives such as culled hippo meat from Ndumu Game Reserve, were not binding. The agreements never came to fruition and the community felt shorthanded. Subsequently, violence and resource destruction have escalated in recent years. Such incidents of violence and conflict include the killing of poachers and the physical assault of rangers who visited the community. Tensions escalated and in

response, community members cut down and burned 3 kms of the game reserve's fence line, demanding that their grievances be heard by the conservation actors (Tong, ca. 2002; FG_2).

In 2008, the Bhekabantu and Mbangweni communities living on the eastern border of the Reserve pulled down the approx. 11-12km fence separating them from the Ndumo Game Reserve in order to access the more arable land there and have cleared areas within the reserve and planted crops. This complex dispute was triggered by claims of a lack of service delivery, unmet promises by government and land claims issues. Illegal cross-border trade with Mozambique is also a factor of this conflict as there is little incentive amongst the Mbangweni and Bhekabantu communities to become involved in conservation efforts. Ndumo Game Reserve continues to face hostility towards the reserve staff by the two communities (Tong, ca. 2002).

This scenario highlights the need for consistent community-engagement to prevent land invasions on protected areas. Furthermore, tangible benefits such as employment, profit sharing and infrastructure delivery resulting from conservation and tourism activities could earn community support for protected areas and be constructive in preserving current protected areas and future conservation initiatives (Wildtrust, n.d.)

The small strip of land surrounded by the game reserve and park is at the centre of a conflict between the areas Bhekabantu and eMbangweni and the government over plans for the Lubombo Transfrontier Conservation Area, which seeks to create a mega game reserve over three countries.
The plan for this project entails the communities, especially the Bhekabantu, having to cede another 6 000 ha to make way for a corridor combining NGR and TEP so that wild animals like elephants and lions can roam freely between the two parks. However, the locals are of the belief that they would not benefit from this project. Moreover, the local villagers in Mbangweni and Bhekabantu who were forcibly removed from their ancestral lands, were said to expect benefits in the form of community levy paid by tourists, employment and access to natural resources within the nature reserves. Unfortunately, these would not come into fruition as the game reserve would not attract enough tourists, sparking conflict between the game reserve and the people of Mbangweni and Bhekabantu who had given up their ancestral lands for the sake of conservation (Makhaye, 2008).

Jones' (2006) study on potential impacts of resettlement is relevant in the present-day conflict between EKZNW and the people of Mbangweni. This study named landlessness (including the social and spiritual value of land), joblessness (including loss of income and subsistence activities), homelessness, marginalization (including the loss of traditional rights and status), food insecurity, loss of access to common property resources; and social disarticulation (including changes in community structure by age, gender, language, etc.) as potential consequences of resettlement driven by the establishment of

the proposed Mbangweni corridor (Jones, 2006). The battle between conservation and rural livelihoods persists in the present day as these rural communities feel that animals are given priority over them whereas the conservation actors and government feel that they cannot allow people to enter the nature reserves and kill the animals for survival as wildlife protection is deemed just as important as human life (Makhaye, 2008).

4.5 Conclusion

Transboundary landscapes and nature conservation play a major role in the livelihoods of rural communities. The history of Mbangweni, who existed with communities across the South Africa/Mozambique border, is important for determining and understanding contemporary patterns of this rural community's existence and cross-border livelihood conduction. The governing institutions in this area–the Tembe traditional authority, EKZNW and the local government– have important contributions to the livelihoods in Mbangweni. Moreover, the establishment and proclamation of TEP and NGR had substantial implications for Mbangweni's livelihoods. These implications were further exacerbated by the plans to create a TFCA that would link NGR and TEP to the Maputo Special Reserves which would further displace and disrupt the people of Mbangweni. The conflicts that have resulted from the proposal of this conservation intervention are important for understanding the tensions that exist and persist today between the nature reserves (specifically EKZNW) and the rural community of Mbangweni. The next chapter presents and describes the second part of the findings of this research.

Chapter 5: Results

5.1 Introduction

The people of Mbangweni have faced many challenges over many decades, primarily due to nature conservation adjacent to the community. Moreover, the existence of national border that separates Mozambique from South Africa along with the conservation areas places further consequences on livelihoods. The border separating the two countries was drawn during the colonial era in the late 19th century and has since been accompanied by the demarcation of transboundary and fortress conservation interventions introduced by the State, further alienating local people from their historical land and livelihoods. This is why currently, there exist contestations against the boundaries and borders that exist between the community and the nearby Ndumo Game Reserve and the Tembe Elephant park. To the community, these borders and boundaries are access restrictions that have negatively altered their livelihoods and have caused many to seek livelihood opportunities across the border in Mozambique. Most of the residents of Mbangweni engage in subsistence farming that occurs on a communal farming plot located approximately 5 kilometres away from the community's location. This communal farming ground has become less fertile and has progressively failed to maintain its capabilities of sustaining the community's livelihoods. The presence of the Ndumo Game Reserve and the Tembe Elephant Park near the community has had minimal impact on alleviating the poverty situation in the area. Any hopes of the nature reserves providing opportunities for employment and community development through tourism to the Mbangweni community have fallen flat. This is attributable to the progressive degradation of the relationship between the rural community and the conservation authorities caused by conflict over different perceptions and understandings of the transboundary landscape that these entities occupy.

The aim of this chapter is to present findings about local perceptions of historical and current impacts of the national border separating Mozambique from South Africa as well as the impact of the nature reserves' presence on the local communities' livelihoods. This chapter also presents the perceptions of conservation authorities and local or national governing actors regarding the transboundary landscape in order to determine how they fit and interplay with each other, as well as with the perceptions and lived realities of the Mbangweni local people. The concept of institutional fit and interplay can be defined as the match or congruence between governance and biophysical systems (Young, 2008). The ability of an institution to have goals and mandates that match or work well with those of another institution or system describes the fit of that institution (Young, 2008). The matching goals and mandates between institutions means that they are able to work together, hence the term institutional interplay. Interplay refers to the degree to which an institution works well with and compliments the functioning of another institution or system (Young, 2008).

To presents the perceptions of conservation authorities and local or national governing actors regarding the transboundary landscape the study looks at and visually depicts the significance of the study site. Furthermore, the key role players in this study site, the historical context of the livelihoods in this transboundary landscape, as well as the community's current perceptions of the transboundary landscape are determined in this study. Additionally, the perceptions (held by the local community) of the institutional fit and interplay is also determined.

5.2 The perceptions of people within the Mbangweni community about the transboundary conservation space

5.2.1 Perceptions about the historical context of livelihoods in transboundary landscape

The focus groups that were conducted yielded information and a timeline (Figure 5) of the historical context of livelihoods in the transboundary landscape.

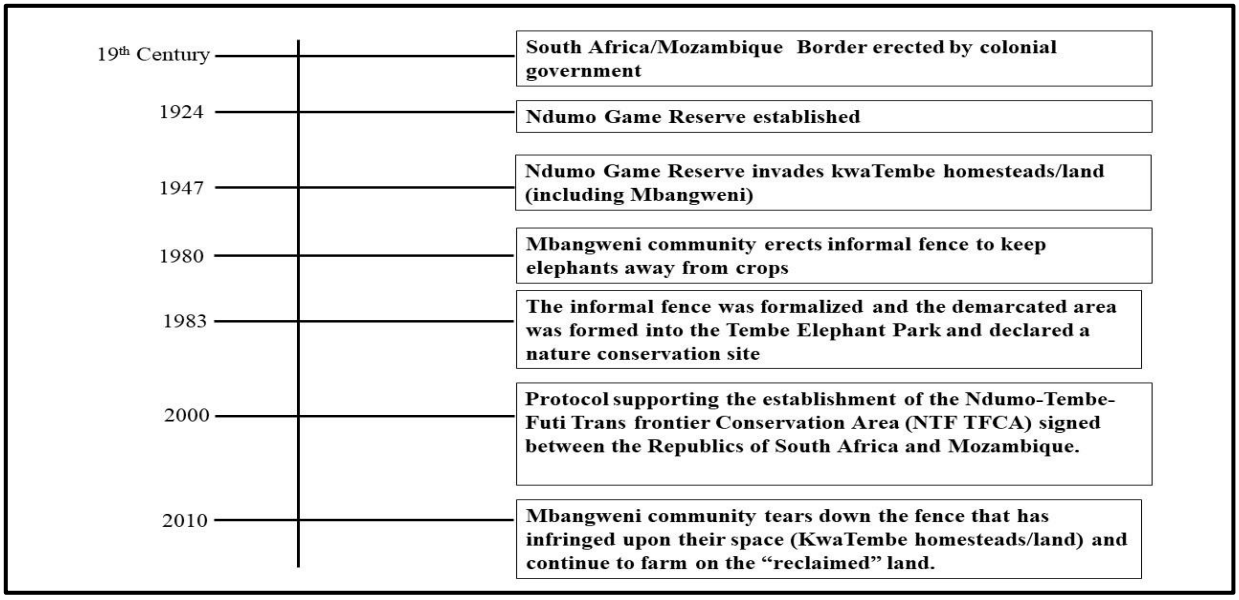


Figure 6. Timeline Depicting Historical Context of Livelihoods in and around Mbangweni

Dissecting this timeline, it can be seen that initially, the South African communities in Northern KZN and the southern Mozambique communities lived as one group/community before a politically motivated national border was erected to separate the two countries (South Africa and Mozambique). This resulted in the separation of the South Africa/Mozambique community that lived together as one. This meant that many livelihoods were disrupted as accessing certain resources was made difficult by this national border. Eventually, the governing traditional governing structures in northern KZN and southern Mozambique agreed to the installation of small passageways and informal border gates that would allow free and easy movement to and from Mozambique for the sake of preserving the livelihoods of the communities separated by this border. This transformed the area into a transboundary landscape wherein which communities, that had and still have historical ties, in two different countries

could still interact with each other and have access to their livelihood landscapes and resources in either country (FG_1, FG_2).

Shortly after the informal border gates were put in, the Ndumo Game Reserve was established on the other side of the Pongola River which is also known to be kwaMathenjwa- an area ruled over by the Mathenjwa traditional authority. This Game Reserve was established for the sake of conserving many species of plants and animals. Soon after, the Game Reserve had an agreement with the Mathenjwa Authority that the Game Reserve could expand to the other side of the Pongola River. This agreement was taken only by the Mathenjwa Authority without consulting the Tembe traditional authority. One of the oral history interview respondents is quoted stating that "the Mathenjwa Authority went behind the backs of the Tembe traditional authority and made a deal with the Game Reserve. INkosi Tembe had no knowledge of this deal". In 1947, with the approval of the Mathenjwa traditional authority, the Ndumo Game Reserve expanded over the Pongola River and erected a fence that cut right through most of the fertile communal lands that the Mbangweni community used for their crop farming. This greatly affected the livelihoods of the Mbangweni community as access to those farming grounds was prohibited. "The Mathenjwa Authority betrayed the people of Mbangweni. Because of them, we were robbed of our land that we used for farming." (FG_2; $OH_{1\text{-}10}$).

On the other side of the eMbangweni, the community erected a very informal and non-invasive fence (in 1980) that would help control and the elephants out of the community's backyard gardens and crop farming plots. A participant stated that "the fences were harmless and erected merely as a means of keeping the elephants out of our plots and away from our crops". Soon after, in 1983, nature conservation institutions formalised this fence– without consulting with the community or receiving approval from the traditional authority– and the fenced area became a demarcation for a conservation site that served to conserve and protect elephants in the area. An oral history interview participant recalls this period: "before we knew it, the Game Reserve had made this fence a formal boundary to keep us out of the land we once walked on freely". This demarcation and formalisation of the fence led to the removal of any people who lived within this fenced area and further prohibited access to any resources and land space that was within the demarcated area. This site then came to be known as the Tembe Elephant Park. The establishment of this elephant park disrupted the livelihoods of the Mbangweni community as land and natural resources (farming land, grazing land etc.) had been taken away from them with little or no compensation and it left the rural community with no alternative livelihood strategies (FG_2; $OH_{1\text{-}10}$). "That is how we, as the community of eMbangweni, came to be situated in between two game reserves with less land in our possession than our forefathers had left for us" stated a focus group member.

The 2000 protocol was signed for the establishment of the Ndumo-Tembe-Futi Trans frontier Conservation Area (NTF TFCA) included the formation of a corridor/passage that would join the

Ndumo Game Reserve to the Tembe Elephant Park and another that would join these nature reserves to the Maputo Special Reserve in Mozambique (formerly known as Maputo Elephant Reserve). These corridors would allow for the free roaming of the animals across and between all three nature reserves. This project was and continues to be heavily contested by the Mbangweni and other surrounding communities as it would require that some people be removed/relocated. Furthermore, the livelihoods of these communities would again be impacted by the restricted land and resource access that would come with the formation of this corridor.

After several years of contesting the NTF TFCA Mbangweni Corridor project, the Mbangweni community decided to fight for their land back from the Ndumo Game Reserve and in 2010 they tore down the fence that enclosed the Ndumo Game Reserve along the fields where the Mbangweni community farmed their crops. The community successfully reclaimed this part of the land from the Ndumo Game Reserve and, to present day, continue to challenge the EKZNW and associated nature reserves on the plan to build a corridor through the Mbangweni community (FG_2; OH_{1-10}). A focus group member stated that "the reserves were taking more and more of our land and we will fight, as our fathers fought, and our children will continue to fight against this. We refuse to have our fertile lands taken from us and we refuse to be removed from our land. This is why you will not find this corridor they speak of here."

The views, expressed by those who were involved in creating the timeline, were supported by the community members who gave accounts of the historical context of the livelihoods in Mbangweni. These interviewees echoed the views of the Northern KZN and southern Mozambique communities living as one and participating in activities such as crop farming, livestock farming and fishing before a national border was erected and before the nature reserves disrupted their livelihoods. These disruptions formed a negative relationship between the community, the nature reserves and associated organisations (for example EKZNW). The main source of conflict, historically and in the present day, is the Mbangweni community's unwillingness to give up their land, resource access and livelihoods to conservation projects that have previously disrupted their livelihoods and offered them no alternative livelihood strategies or benefits sharing opportunities (FG_2; OH_{1-10}).

5.2.2 Perceptions about the governance of the transboundary conservation area

Entity	**Ranking**
6 INkosi (The Chief)	☺
7 Induna (Chief's headman)	☺ ☺ ☺ ☺ ☺
8 Municipality/Councillor	☺ ☹
9 National Government	☹

10 Ezemvelo KZN Wildlife	☹

Figure 7. List and ranking of key role players in transboundary landscape

To visually represent the perceptions of the Mbangweni community on the entities they consider to major role players in their livelihoods, a ranking exercise (Figure 6) was conducted with the focus groups. This exercise allowed the study to gain insight into the community's perceptions of the key role players and the kinds of influence and impacts these role players have where the Mbangweni livelihoods are concerned. The perceptions of the governing and conservation institutions held by the community speak to how these institutions fit and interplay with the lived realities of the Mbangweni community. The influence and impact of the different entities as ranked by the community members reflects the importance of each entity on the livelihoods of the Mbangweni community and, therefore, way in which the community experiences or constructs its lived space. This lived space could be in conflict of the conception and perception of the landscape by other entities such as the nature reserves or the local government. The conflicting views and conceptualisations of the landscape open opportunities for institutional bricolage between the different entities and the lived realities of the community.

The ranking exercise was a way of determining which entities were considered to be the major role players in this community. The key actors were listed, and the community members were asked to provide each key actor with a number of stickers between zero (0) and (5). This would show which how much influence the listed entities were considered to have over the livelihoods of the community. Zero stickers mean very little to no influence and five stickers means that that entity has a great influence over the livelihoods of the Mbangweni community. The focus group participants were then asked to give the stickers smiling faces or sad faces to represent the positive and/or negative impact that the entities had on the livelihoods of the Mbangweni.

Dissecting Figure 6, it can be seen that the chief/iNkosi is an entity that has minimal presence and direct influence but is seen to have a good impact on the livelihoods as the chief works with his headman (iNduna) who oversees the day to day functioning of the community on behalf of the chief. INduna (the chief's headman) has a big influence over the livelihoods of the community and is said to have a positive impact on their livelihoods. This is because iNduna works directly with the community and lives within the community and, therefore, is very close to the struggles and challenges faced by the Mbangweni community. The community considers iNduna to be one of the biggest role players in their livelihoods. The local municipality/local councillor is seen to not have as much of an influence as the traditional authority (iNduna) and is said to have both a positive and a negative influence on livelihoods. This could be attributable to the fact that the local and national governments do not have much of a presence in the community, but a local councillor does exist in the community although he has little influence

above the chief's headman. Most of the governance is overseen by the traditional authority. This is further illustrated by the lack of stickers next to the National Government and a sad face indicating that the government's little-to-no presence in the area has negative livelihood impacts with consequences such as lack of government efforts to build schools, to develop the area and bring employment opportunities, water, electricity and adequate healthcare facilities as well as university funding opportunities for those who wish to further their education. Lastly, the Ezemvelo KZN Wildlife (EKZNW)−which includes the Ndumo Game Reserve and the Tembe Elephant Park− is seen to have little to no major influence on the day-to-day livelihoods of the Mbangweni community. However, through past and current negative interactions between EKZNW and the community, EKZNW and its nature reserves are seen to have negative impacts on the community's livelihoods due to the forced removals, lack of community development and resource access restrictions which have altered the livelihoods of Mbangweni. This exercise, therefore, concluded that the traditional authority as well as the nature reserves/EKZNW are entities that can be considered as being major role players in the livelihoods of the rural community.

In addition to the ranking exercise, semi-structured oral history interviews were conducted with the Mbangweni community members. These interviews allowed the study to collect qualitative data and gain insight into the key actors and their roles and contributions in this transboundary landscape. Conducting these interviews meant that the study could present the perceptions and perspectives of the local community on the key role players that influence their livelihoods and resource access. As most of the community is dependent on subsistent farming on communal farming grounds, many households that were approached for interviews were empty as the occupants had gone to the communal farming grounds from very early in the morning. Nevertheless, 10 oral history interviews were conducted in Mbangweni, and the study collected information on the key role players.

Most of the residents of the Mbangweni community that were interviewed were originally from the area and a few were from neighbouring villages (Bhekabantu, Ndumu, kwaMathenjwa etc.). The interviews yielded information that pointed to many residents of Mbangweni being born and raised in the area. The interviewees brought forward the fact that a few other residents were from other parts of South Africa and southern Mozambique. "We still have close family members that we visit on the other side" stated one correspondent. Many of the people in Mbangweni and their families had been born and raised in the community. The interviewees shared that the community was heavily dependent on subsistent farming as opportunities to part take in other economic/ livelihood activities were minimal. This community has been dependent on subsistent farming since the rural area called Mbangweni came to be prior to the early 1920s ($OH_{1\text{-}10}$).

The community members expressed their views on the presence of the different governing institutions and other third-party organisations such as the nature reserves. In facilitating and developing their

livelihoods, the community members that were interviewed expressed that they, as the Mbangweni community, were one of the major role players that had an impact on their own livelihoods. This is supported by the fact that the Mbangweni community members are reliant on each other and the neighbouring communities (e.g. Ndumu, Bhekabantu, southern Mozambique etc.) for assistance with the communal farming grounds and sharing the yields of the crops farmed on those grounds, collective support for the contestation of any matters that threaten their livelihoods and for many other social connections that assist in the functioning of the rural households (OH_{1-10}).

Furthermore, the interviewees also expressed that other entities that played major roles in the livelihoods of the community include the traditional authority wherein which the chief's headman (iNduna) lives within the community. The Mbangweni community, under the Tembe traditional authority, is governed almost solely by the traditional authority who puts in place the laws and policies that the community must abide by. Some of these laws include: where people can live i.e. the chief will assign families plots of land and they are to remain in those plots unless permission to relocate is granted by the chief or his headman, what official judicial processes are required (within the realm of traditional authority) for the different infringements of the laws as well as the processes and procedures for any persons/groups/organisations wishing to conduct research in the area. The traditional authority as the major governing institution in the area is said to have a much larger presence and impact on the community than the local and/or national government institutions. A respondent stated that "nothing happens on this land withoit the knowledge of or permission from the INkosi and the traditional authority." Moreover, the Ndumo Game Reserve, Tembe Elephant park and more especially Ezemvelo KZN Wildlife (EKZNW) were also named by the community members as entities that play a major role in the livelihoods of the Mbangweni community. Although not seen to play a particularly positive role in developing and bettering the livelihoods of the community, the presence of the EKZNW is said to have certainly altered the community's livelihoods. Interactions between the community and the nature reserves are almost non-existent even though these two entities exist adjacent to one another (OH_{1-10}). An interviewee is quoted stating that "The nature reserves exist here near us but they do not really have much to do with our livelihoods, they do not really contribute anything positive to our livelihoods"

The key informants that were interviewed, to get an insight of their perspective of the major role players in the Mbangweni and surrounding areas, were employees of one of the nature reserves involved in this study. These informants are also members of the Mbangweni and Ndumu communities. Their input, regarding their perspectives of the major role players and the interactions between the nature reserves and the local community, is valuable to the study as it contributes a bilateral view of the functions of the nature reserves in the context of the Mbangweni community's livelihoods. These informants are relatively new to the nature reserve but were still able to provide some information regarding the nature reserves' role in and its impact on the livelihoods of the nearby rural communities.

The data gathered from these interviews showed that the Ndumo Game Reserve and the Tembe Elephant Park have been in existence since 1924 and 1983, respectively. Each nature reserve was established for different conservation-related reasons initially and have since transformed to include other forms of conservation as well. The Ndumo Game Reserve was established for the conservation of different types of flora and fauna and in the present day, it continues to provide means of conservation and protection of those different species of flora and fauna. The Tembe Elephant Park was initially established for the protection and conservation of elephants but has evolved into a nature reserve that provides conservation and protection of not only elephants but also of many other species of animals and some flora ($EKZNWM_{1-3}$).

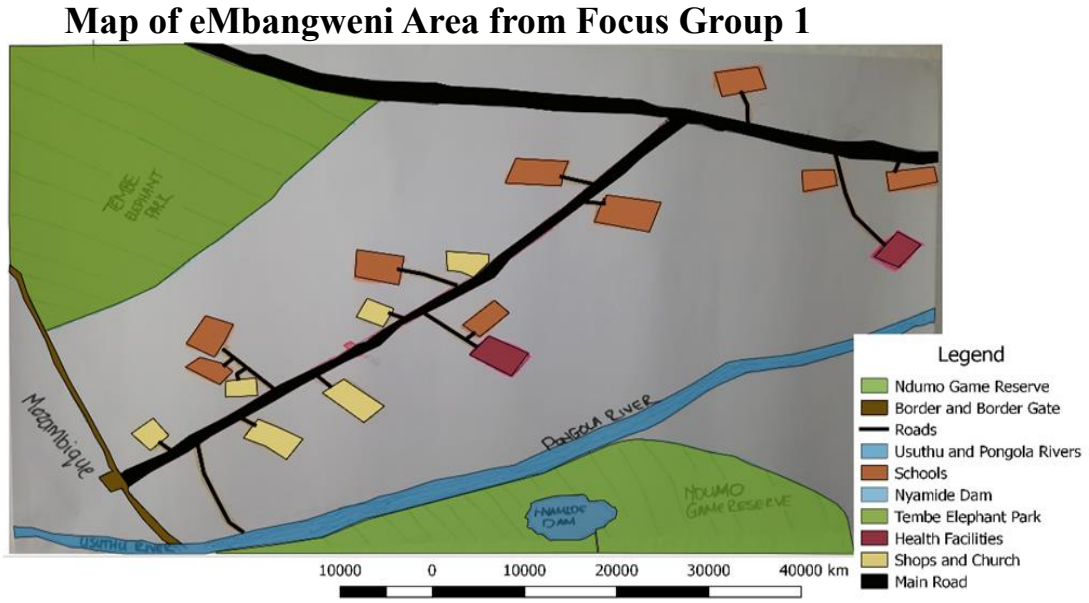
Moreover, findings also reveal that these nature reserves have altered the livelihoods of the Mbangweni community, thus, making them major contributors and key role players in how the local rural communities function and conduct their livelihoods. The Ndumo and Tembe nature reserves are operated by the Ezemvelo KZN Wildlife (EKZNW) organisation. EKZNW, over many years, has been met with varying degrees of contestation and conflict from the Mbangweni community regarding their plans for the nature reserves especially where the livelihoods of the community would be impacted. The information gained from interviewing the key informants has shown that Ndumo Game Reserve and the Tembe Elephant Park, beyond the forced removal of people living in the area for the purpose of establishing these nature reserves, has restricted access to natural resources such as fertile agricultural/farming land, animals that were hunted for food as well as grazing land for the communities' livestock. In addition, the nature reserves have not provided alternative livelihood activities or resources to replace those that were historically taken from them. The nature reserves are seen to not positively contribute to the community's development through tourism, education and employment opportunities. These livelihood-altering actions of the nature reserves have made it difficult for the community to fully accept and appreciate the presence of these nature reserves, thus, also making it difficult for these entities to live peacefully within this transboundary landscape.

The study also captured and visually represented the current perceptions that the community had of the transboundary landscape they occupy as well as their perceptions of how the major role players and institutions fit and interplay with each other and with the lived realities of the community.

5.2.3 Current perceptions of the transboundary landscape

The perceptions of the transboundary landscapes that the Mbangweni community was expressed and represented through a participatory mapping exercise (Map 10 and Map 11) that allowed the community members to visually communicate the way they see their landscape. Two participatory mapping exercises were carried out with two groups that differed in terms of the age groups of the participants. Group 1 (Map 10) comprised young members of the community and Group 2 (Map 11) was made up

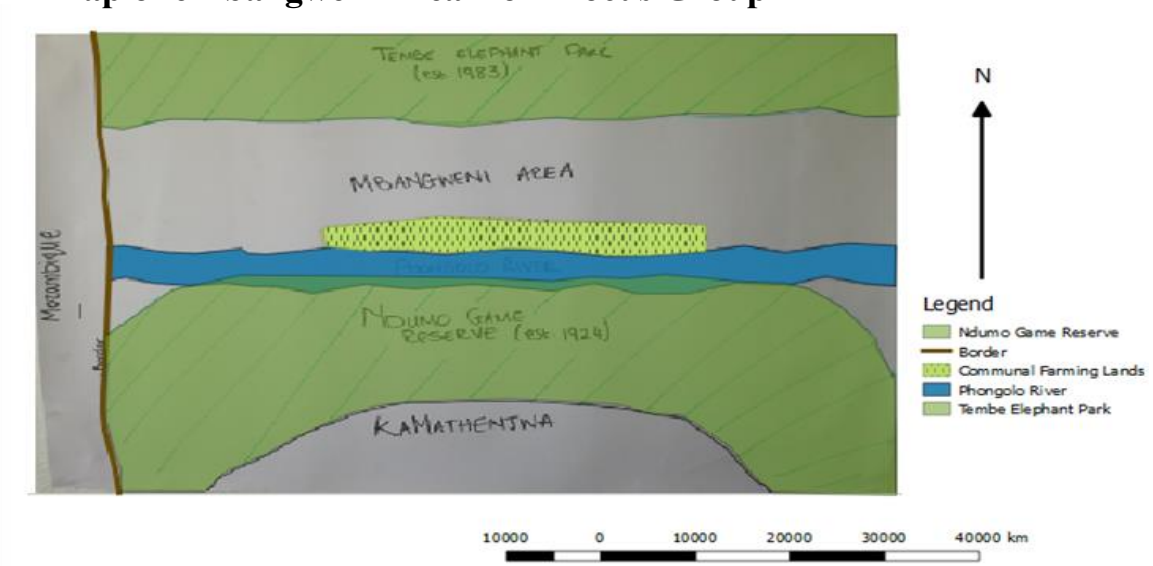
of the older generation community members some of who were also a part of the tribal council. The two groups presented their perceptions of their transboundary landscape as follows:



Map 9. Map showing perceptions of the transboundary landscapes from Focus Group 1

Dissecting the maps produced by the focus groups, it can be said that even the residents of Mbangweni have slightly differing perceptions of their landscape. Group 1 (FG_1) produced a more detailed map that may speak to what they see as important resources and features for their livelihoods. Group 1 seemed to be more observant of the details of the area's layout than Group 2 (FG_2). Map 9, depicting the younger generation's perception of their space also visually represents the major role players such as the Tembe Elephant Park, the Ndumo Game Reserve and Mozambique. The group observed these as major contributors to their livelihoods where the nature reserves have restricted access to certain resources and opportunities and Mozambique has offered alternative mean of making a living. Furthermore, this group observed features such as schools, medical facilities, the Pongola River as well as the informal South Africa/Mozambique border gate as important features that in their landscape that assist in creating and progressing certain aspects of their livelihoods. For example, the border gate allows the residents of Mbangweni to travel to and from Mozambique for family visits, to get natural resources found in Mozambique and to participate in economic/employment opportunities in Mozambique. This map reflects what the group deems as the most important for creating livelihoods. This includes schools, natural resources such as rivers as well as nature reserves where they often seek employment. This perception of the landscape does not fit that which is held by the nature reserves, however there is opportunity for institutional bricolage which would see the youth working together with the nature reserves to optimise the benefits of the landscape for each group.

Map of eMbangweni Area from Focus Group 2



Map 10. Map showing perceptions of the transboundary landscapes from Focus Group 2

The map produced by the second group (Map 10) was less detailed, but it provided a general overview of how the older generation in Mbangweni view the landscape they occupy. Map 10 also contained some historical information such as the dates of the initial establishments of the two nature reserves. This map also depicts the features and major role players that the second group deemed important for their livelihoods. The older generation were more aware of major features such as the nature reserves, the Pongola River, the communal farming fields (*amasimu*) as well as the South Africa/Mozambique border. The implications of each feature are different for each livelihood strategy the community may engage in. For example, the communal farming fields have good implications for the community's livelihoods in contrast to the nature reserves which have had a detrimental impact on the livelihoods of the people in Mbangweni. This map reflects what the group of elders deems as the most important for creating sustainable livelihoods. This communal farming grounds and natural resources such as rivers. This perception of the landscape does not fit that which is held by the nature reserves, however there is opportunity for institutional bricolage which would see the community at large working together with the nature reserves to optimise the benefits of the landscape for each group. The maps reflect that the nature reserves are seen as important (although negative) contributors to the community's livelihoods.

The way in which the community groups perceive the landscape fits their lived realities but does not fit or interplay with the conception and perception of the landscape by the nature reserves. This creates opportunities for both conflict and institutional bricolage.

The key informants that were interviewed echoed the perceptions of the landscape expressed by the focus groups. These interviewees also brought forward the importance of the nature reserves, the communal farming fields as well as the border and its informal gate in enhancing or inhibiting the livelihoods of the Mbangweni community. Further to these views, the interviewees expressed how the

landscape had not only been historically changed by the nature reserves but was also at risk of further change should the NTF TFCA be established in the area. A major issue that was identified with these changes was the nature reserves and associated conservation institutions' lack of communication and consultation with the local communities. Contrastingly, the importance of the positive relationship that the northern KZN communities have with the southern Mozambique communities was also expressed. "They used to live as one population group so there are still groups that are closely related to each other that live on either side of the border. This is why the relationship between the two communities is so good" stated a key informant respondent. This positive relationship between the traditional authorities and communities on either side of the border has resulted in the community members perceiving this transboundary landscape as a positive alternative means of creating, maintaining and enhancing their livelihoods (EKZNWM$_{1\text{-}3}$).

Map of nature conservation sites surrounding eMbangweni Area

Map 11. Map produced by conservation institution representing their perception of the landscape. Source: Peace Parks Foundation

Map 11 above shows how the nature conservation institutions understand the landscape in comparison the community's understanding of the landscape. The map shows a heavy presence of nature conservation sites. This speaks to the conservation governance institutions' prioritisation of nature conservation over the livelihoods and well-being of the Mbangweni community. The map produced by the conservation institution does not show the presence of communities in the area and does not show the features of the landscape, such as the communal farming grounds, that are considered important by the community for their livelihoods. The differences between the nature conservation institution's map and the maps produced by the community show that the conservation institution views and uses the landscape differently to how the community views and uses it. The differences in perceptions and land use prioritisation has and continues to cause conflict between the Mbangweni community and the nature reserves nearby. The way in which communities perceive their landscape stems from the values and beliefs they hold as well as experiences of forced removals and conflicts. These values and beliefs are

drawn from their historical and current occupancy experiences of the landscape. The perceptions also stem from what the communities view as important for conducting and fulfilling their livelihood needs. The conservation nearby also perceives the landscape based on what they view to be important for sustaining the conservation efforts. The perceptions of the landscape held by the community conflict with those held by the nature reserves. These opposing views/perceptions therefore create complexities in the institutional fit and interplay as well as in the co-existence of these entities on one landscape. The way in which the nature reserves have conceived the landscape through policies, boundaries and maps has influenced how they view and perceive the space and, therefore, contributes to the complexities created in the lived realities of the Mbangweni community who are unable to access certain spaces and resources to fulfil their livelihood needs. These conflicting perceptions of the landscape create opportunities for institutional bricolage which would feedback into Lefebvre's spatial triad of a thriving social space creation.

5.2.4 The Mbangweni community's current perceptions of institutional actors in the transboundary landscape

This research project sought to get the community's perspective on the institutions that may have positive and/or negative impacts on their livelihoods and determine whether these institutions are capable of fitting and interacting with each other's mandates as well as with the lived realities of the Mbangweni community. As discussed in the Key Role Players section, the key actors that have an impact on the community's livelihood include the chief, the chief's headman, the municipality and/or local councillor, the national government as well as EKZN and the nature reserves.

In engaging with the community members, it became clear that the institutions with the greatest influence over the community's livelihoods include the chief's headman (traditional authority) and the nature reserves (including EKZNW). The interaction between the community and the chief's headman (who represents the traditional authority that governs Mbangweni) is a positive one. A focus group participant noted that "the chief's headman is the one who stands and represents iNkosi and so he is the main person of the law in this land". Another participant supported this statement and added that "the laws set are for the good of the people, they are fair laws and the chief's headman is fair to the people and takes good care of the people and so we have a positive relationship with him. He is one of us here in Mbangweni". The traditional authority's rules and laws are seen to be aligned quite well with the lived experiences of the Mbangweni community, especially where their livelihoods are concerned. Moreover, the community members expressed that they were grateful that the traditional authority dwells amongst them and, therefore, also experiences their livelihood struggles and challenges from the ground. The traditional authority is said to fit and interplay well with the community's lived experiences (FG_1; FG_2; OH_{1-10}). An interview respondent noted that "The traditional authority, more specifically the chief's headman, lives amongst us so he knows what we are happy about and what we struggle with. He faces the same challenges as us so he relates better to our situation."

Further engagement with the community members, the key informants and the members of the local traditional authority yielded information that little to no continuous and consistent engagement and consultation occurred between the conservation institutions and the local communities and/or the traditional authority regarding the establishment and expansion of the nature reserves. This lack of engagement and consultation has resulted in a broken relationship between the rural community of Mbangweni (including its traditional authority) and the nature reserves nearby. The community, therefore, expressed that the nature reserves' mandates and actions do not fit with those of the traditional authority and do not fit with the lived realities of the community nor do they allow for positive interplay or cooperation between the nature reserves and the local traditional authority. This mismatch of mandates and ideologies between the community (and the traditional authority) and the nature reserves is due to the disruption of livelihoods brought forward by the nature reserves (OH_{1-10}, $EKZNWM_{1-3}$, TTA).

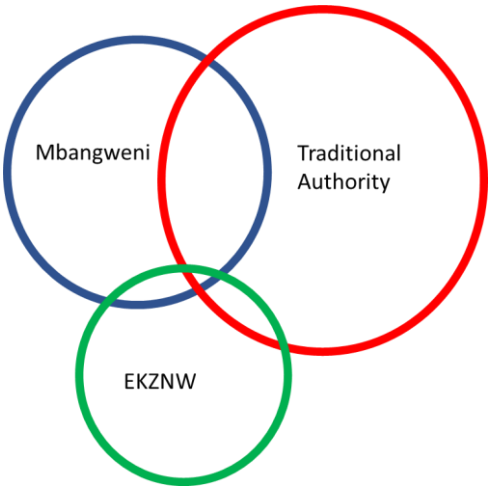
Moreover, the community and the traditional authority expressed that they were not consulted when the plan for the NTF TFCA was initially formed. No agreements were made between them and the conservation efforts who tried to initiate the establishment of a corridor that would link the Ndumo Game Reserve to the Tembe Elephant Park. This further illustrates how the plans and mandates of the nature reserves does not fit with the lived realities of the local community whose livelihoods would have been destroyed or derailed because of the TFCA's corridor and does not encourage interplay between nature conservation and traditional authority in a rural area.

Lastly, the study found that the Tembe Elephant Park has a sign of the nature reserve outside the gates naming the reserve as the Tembe Elephant Park but inside the premises, the name Tembe Elephant Park is not used or displayed anywhere. Instead, the branding of the items inside the nature reserve have Ezemvelo KZN Wildlife, SANParks and EKZNW Peace Parks. "The community members, therefore, perceive that the nature reserve may use the name Tembe Elephant Park outside of the premises as a façade or front for the sake of appearing as though they are in cooperation with the Tembe traditional leaders that govern the area when, in reality, they are not" noted a key informant interviewee. This, again, leaves the community and traditional authorities with a negative perception of the nature conservation efforts in this area of northern KZN (OH_{1-10}, $EKZNWM_{1-3}$, CL).

To illustrate the interactions between the key role players that impact the livelihoods of the Mbangweni community, a Venn diagram exercise was conducted with the focus groups whose views were supported by the community members who were interviewed individually and the key informants. The Venn diagrams below also depict the overlap of the interactions between the key role players of the transboundary landscape. The Venn diagrams below illustrate the dynamics of the interactions according to the Mbangweni community and their views and perceptions of how the community, the nearby nature reserves and the traditional authority co-exist with each other.

These Venn diagrams below represent the way in which the community perceives the institutions as well as the way in which these institutions work to fit and positively interplay with each other and with the lived realities of the Mbangweni community.

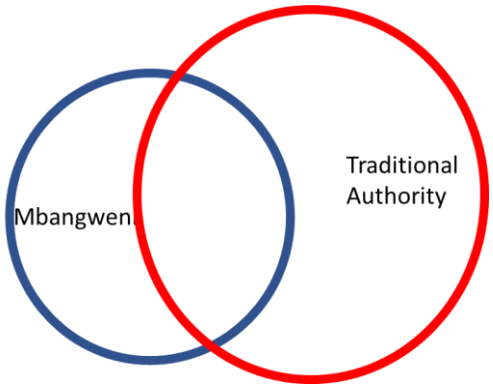
The dynamics of the interaction overlap between the Mbangweni community, the Traditional Authority and EKZNW is shown below through the intersections of the circles. The amount of influence each entity has on the community's livelihoods is reflected through the size of the circle.



The Venn diagram above depicts the interactions between the Mbangweni community, the Traditional Authority as well as the conservation authorities- Ezemvelo KZN Wildlife. In dissecting the Venn diagrams, it can be noted that the three entities with the most influence on the livelihoods of the Mbangweni community are the community itself, the traditional authority as well as Ezemvelo KZN Wildlife. This exercise was conducted and the amount of overlap between the circles determines the amount of interaction, fit and interplay between the institutions/entities where the community's livelihoods are concerned. The residents of Mbangweni concluded that the only interaction causing overlap between EKZNW and the community or the traditional authority in these Venn diagrams is based on the fact that these three entities are occupants of the same transboundary landscape.

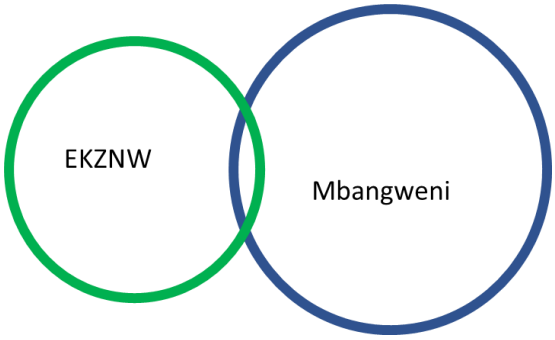
The size of the circle represents the amount of influence that a particular institution has on livelihoods in Mbangweni. In general, it can be seen that the traditional authority holds the majority of the power in the area when it comes to making decisions regarding the community's livelihoods.

The Venn diagram below depicts the dynamics of interaction overlap between the Mbangweni Community and Traditional Authority as well as the proportion of influence the Traditional Authority has over the Mbangweni community's livelihoods.



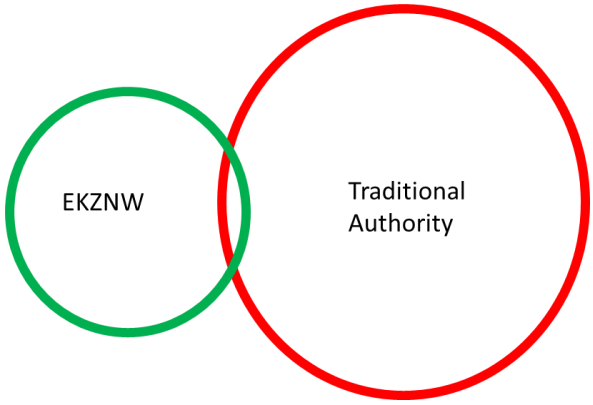
The Venn diagram above reflects the fact that the Traditional authority holds great power and authority over the Mbangweni community. The Mbangweni community depicted this by allocating the traditional authority a much larger circle in comparison to the one allocated to the community. Furthermore, a great amount of interaction overlap is found between the Mbangweni community and the traditional authority. The traditional authority holds a substantial amount of power over the livelihoods of the community and, so, the governance of the traditional authority largely intersects with the community and its livelihoods.

The dynamics of interaction overlap between the Mbangweni Community and EKZNW is shown in the Venn diagram below. The diagram also shows the proportion of influence EKZNW has over the Mbangweni community's livelihoods and day-to-day decision-making processes.



The Mbangweni community is seen as having more influence over their livelihoods than EZKN who are seen to have minimal influence over the lives of the Mbangweni community. Furthermore, the community and EKZNW are seen to have little to no interactions occurring between them. This has resulted in either entity having little to no influence over the daily operations of the other.

The dynamics of the interaction overlap between the Traditional Authority and EKZNW are shown below. The Venn diagram also depicts the proportion of power each entity holds for governing over the area and over the livelihoods of the Mbangweni community.



The community expressed and reflected upon the fact that Ezemvelo KZN Wildlife has little interactions with community and traditional authority and, therefore, has little influence over the livelihoods and little to no power in setting the rules and laws that the community must abide by in the community space. The authority and power of the EKZNW is ranked below that of the traditional authorities. Traditional authority has a large amount of influence over the Mbangweni area. It is the main form of governance in the community, but it does not have much influence and power over the conservation areas. This has been demonstrated by the challenging task of engaging with the conservation agency EKZNW regarding access to land and natural resources that were taken away from the community when the nature reserves were established.

5.3 Key findings of the study and Conclusion

The study has explored the dynamics of the interactions between nature conservation, formal national borders and rural livelihoods. These interactions have also revealed the impacts that nature conservation and borders have on the livelihoods of the rural Mbangweni community. The nature of these impacts is largely dependent on how each entity views and understands the landscape it occupies. The community perceives the landscape as a space for conducting their livelihoods. Although, within the community, different groups have different views of what's important for their livelihoods, the community as a whole has the same perception of the landscape.

The study also discovered that the conservation authority has of the transboundary landscape differs from that of the Mbangweni community. EKZNW and associated nature reserves view the landscape as one that should primarily serve the purpose of nature conservation. This is evident in the conservation authority's attempt to build a fenced-off corridor that would connect NGR to the TEP. Connecting these nature reserves would be done for the purpose of conserving the nature between the two nature reserves and allowing the animals to travel between the nature reserves. This corridor would cut right through the Mbangweni community's residential area, thus, disrupting their lives and livelihoods. The construction of this corridor would be in fulfillment of the proposed Ndumo-Tembe-Futi Transfrontier Conservation Area which forms a part of the General Trans-Frontier Conservation and Resource Area Protocol signed in 2000.

A disconnect in perceptions is, therefore highlighted by the findings of this study. Furthermore, the study also found that there are clear implications of the existence of the border and nature conservation sites on the livelihoods of the Mbangweni community. These implications may be attributable to the disconnect in perceptions of the transboundary landscape.

The disconnect reflects a need for strengthened interactions between the local or national level governance, nature conservation governance as well as the traditional authority to minimise the negative impacts or implications on the community's livelihoods.

This chapter presented the findings from the case study used for this research project. The findings from this study site emphasized the importance of understanding the communities' perceptions on the institutions that impact their livelihoods. Furthermore, these findings also gave insight into the key role players that impact the livelihoods of both rural communities, the historical context of the livelihoods in this study site and the current perceptions that the people of Mbangweni hold of the transboundary landscapes that they occupy as well as their perceptions of how the institutions that govern over them fit and interplay with each other and with their lived realities.

The largely qualitative data that was gathered from the fieldwork and the desktop research showed that the people of Mbangweni have historic ties to the communities in southern Mozambique that still prevail in present day. These ties have allowed the local people the opportunities to develop alternative livelihood strategies following forced removals from their land for conservation purposes as well as limited/restricted access to natural resources and spaces that they had once used for developing their livelihoods. Lastly, the chapter also captured the major disconnect between mainly the conservation institutions and the lived realities of the rural communities. This disconnect also exists between the different governing institutions (e.g. conservation authorities and the traditional authority).

The next chapter will analyse and discuss these findings in greater detail and try to reconcile them with the objectives of this study. Furthermore, Chapter 6 analyses and discusses, further, the impacts of the disconnect in perceptions, the implications of the national border and nature conservation on the community's livelihoods as well as the need for interactive governance and, potentially, bricolage.

Chapter 6: Analysis and Discussion

6.1 Introduction

The findings of this research project have shown that transboundary landscapes are complex spaces with multiple entities playing different roles in the livelihoods of communities within the landscapes. The interactions between these entities become complex when the perceptions of the landscape, held by the different entities, differs and the landscape is seen to be a space for multiple land uses that often cannot exist simultaneously in the same space. This could often lead to conflict between the entities and, even though the landscape may be divided into the different land uses, the entities will continue to fight over the space as each sees their use and perception of the land as more important. This study has sought to unpack the complexities of one such transboundary landscape linked to conservation governance in northern KZN. This chapter analyses and discuss the key findings of this study. Emerging as one of the key findings of the study, the conflicting perceptions of the transboundary landscape is discussed in this chapter. Furthermore, the implications of a transboundary landscape coupled with nature conservation on the livelihoods of the Mbangweni people is also found to be a key issue in this study. The last key finding of this study is the need for governance interactions that would foster institutional bricolage. The chapter also references a similar case study of the Mvutshane village in Kosi Bay next to iSimangaliso Wetland Park in northern KZN.

6.2 Conflicting perceptions of landscape

Landscapes and **s**paces may not be viewed in the same way by all the entities that occupy that landscape. This is the case in the transboundary landscape occupied by the people of the Mbangweni community, the traditional authority governing over the people of Mbangweni as well as the Ndumo Game Reserve and Tembe Elephant Park. The differing perceptions of this landscape are attributable to the differing land uses that each entity prioritises. Lefebvre triad of conceived, perceived and lived space illustrates the lack of commonality of understanding the primary purpose of a space or landscape (Lefebvre, 2008). Furthermore, this lack of cohesive and unified perception of a landscape may cause issues for the rural communities dependent on the landscape for their livelihoods. The use of the landscape by another entity may infringe upon the livelihoods of the local community and, therefore, disrupt the community's livelihoods (Hansen, 2013).

Supporting the three levels of Lefebvre's triad, Jentoft and Bavinck (2014) suggest competing and overlapping resource-use systems from different governance systems governing over a common landscape. Municipal, national and conservation authorities that perceive and use the landscape they

share in isolation from each other and without interacting or combining their uses, leads to an overlap in the landscape resources used. Jentoft *et. al* (2010) suggest that governing institutions create images of the landscapes and systems they are governing and what their role is in the governance of these landscapes and systems. The classification of these images includes the classical image of the governing system (top down decision-making pyramid governing approach) and of the human-in-nature system (top down trophic pyramid governing approach) with alternative images (roses and inverted pyramid) (Jentoft *et. al,* 2010; Jentoft and Bavinck, 2014). The images can also be referred to as beliefs or subjective knowledge and may represent some form of implicit image of what they are governing that informs how they govern (Jentoft *et. al,* 2010). These images are often implicit and are not reflected upon or discussed in the governance process or with other governing institutions. However, these images have real implications on the ground for the landscapes and systems they govern over (Jentoft *et. al,* 2010).

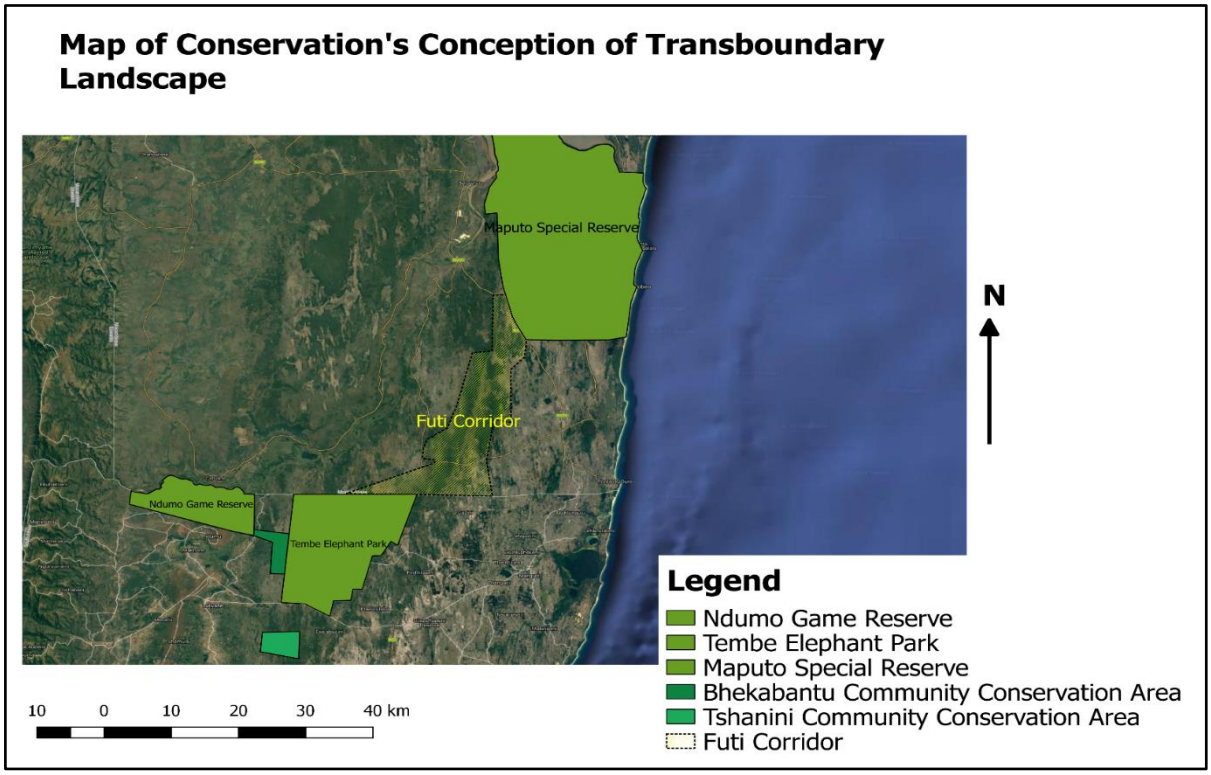
Lefebvre's (1991; 2008) theory on conceived, perceived and lived space is accurately captured and illustrated by the land use arrangement in the transboundary landscape within which Ndumo Game Reserve, Tembe Elephant Park and the Mbangweni community exist. This landscape has multiple layers of governance and institutions that govern and shape the landscape. Each of these institutions view and understand the landscape differently and, therefore, impose governing strategies that may not fit with the other institutions' strategies or with the lived realities of the people of Mbangweni.

This study has found that the land use arrangement in the Maputaland transboundary landscape– specifically the area occupied by Ndumo Game Reserve, Tembe Elephant Park and the Mbangweni area– fits into the model of Lefebvre's theory of space and Jentoft *et.al* (2010) governance images model of governance systems established without consulting the lived realities of the local communities. This is demonstrated and analysed using maps created using geographical information systems software.

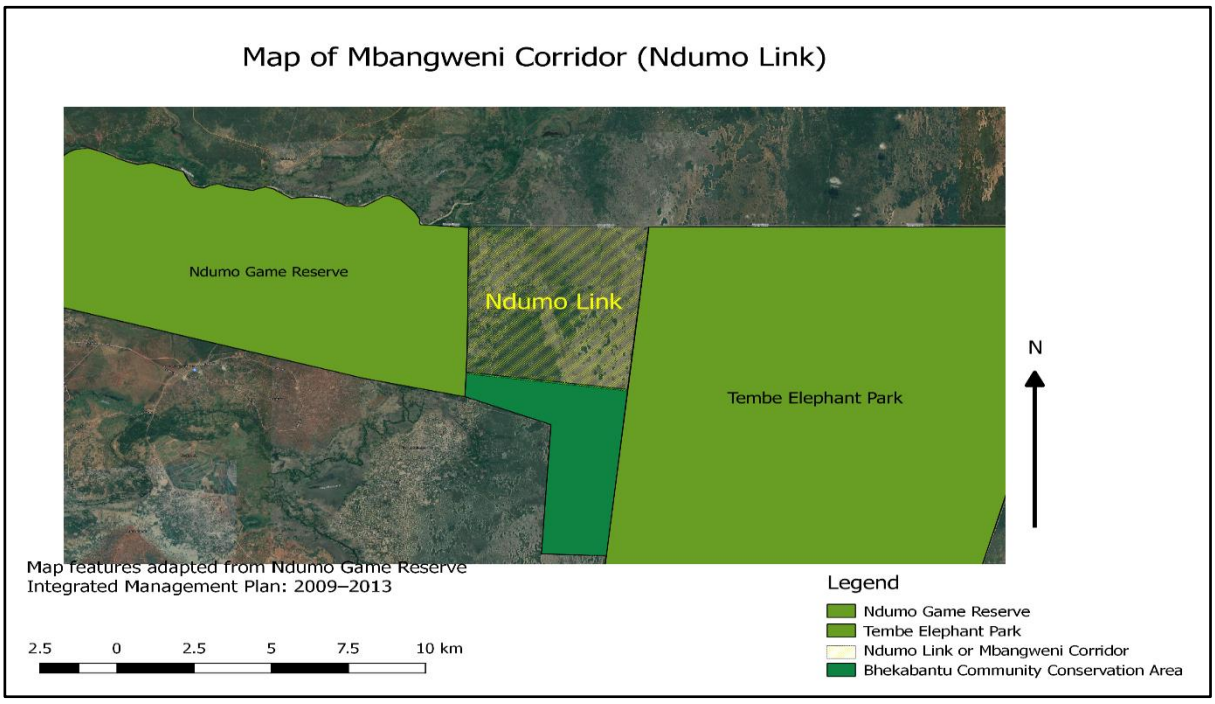
Conceived Space

Map 13 and 14 below illustrate the way in which the conservation governance institution in question, i.e. Ezemvelo KZN Wildlife has conceived the landscape. The maps show a dominance of nature conservation with the Ndumo Game Reserve being located close to the Tembe Elephant park which, in turn, is linked to a nature reserve in Mozambique–the Maputo Special Reserves–through the Futi corridor. EKZNW has imagined and designated these areas solely to nature conservation. Furthermore, conservation authorities in this area have made plans to extend its territory and join the Ndumo Game Reserve to the Tembe Elephant Park through the Mbangweni Corridor (also known as the Ndumo Link). This suggests that the nature conservation institution has constructed this transboundary landscape with

nature conservation as the priority land use. The construction of this landscape as one that mainly prioritises nature conservation was and continues to be enabled by the past injustices of apartheid that resulted in the forced removals of many people in this area to make space for nature conservation (Ezemvelo KZN Wildlife, 2009; FG_2). The displacement and forced removal of people in this area did not occur until 1924 when the area, now known as the Ndumo Game Reserve, was declared a nature conservation site. Current conservation governments continue to benefit and capitalise on these injustices as conservation continues to thrive in this landscape even at the cost of the local communities' livelihoods and well-being (Ezemvelo KZN Wildlife, 2009).



Map 12. Nature reserves and joining corridor of the Lubombo TFCA showing the nature conservation authority's perception of the landscape.



Map 13. Conservation authority's representation and conception transboundary landscape through the proposed Mbangweni Corridor (Ndumo Link).

The way in which this landscape is conceived by the nature conservation institutions has negative implications for the livelihoods of the Mbangweni community. The policies and boundaries created by the nature conservation institutions have lessened the quality of life for the residents of the Mbangweni area in that access to critical natural resources have been decreased or completely diminished. The conceptualisation of the landscape as one that should prioritise nature conservation has pushed the livelihoods of the Mbangweni community to the side-lines and has, therefore, opened gaps for conflict between the rural community and the adjacent nature conservation efforts.

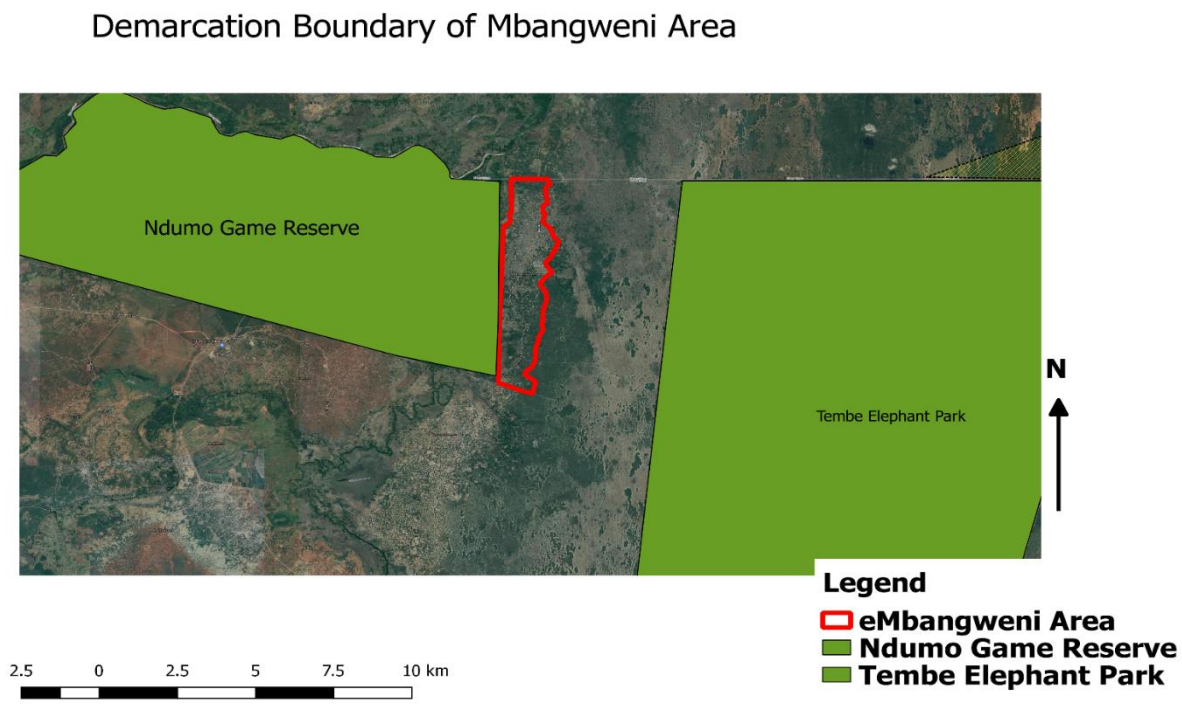
Perceived Space

The Mbangweni, NGR and TEP transboundary landscape can be broken down into dominated space and appropriated space.

i. Dominated Space: Government Interventions

The transboundary landscape has features of Lefebvre's concept of dominated space. The national and local government's physical interventions are visible through the boundaries of districts, local municipalities and the demarcation of the Mbangweni area (Map 15). These boundaries and demarcations not only show how these governing institutions have imagined the space but also how they have transformed this landscape that was once borderless and fluid into a boundary-heavy and boundary-controlled landscape. The laws of these district and municipal borders help establish the government's perception of the landscape (i.e. as a separate districts and municipalities). Moreover, the

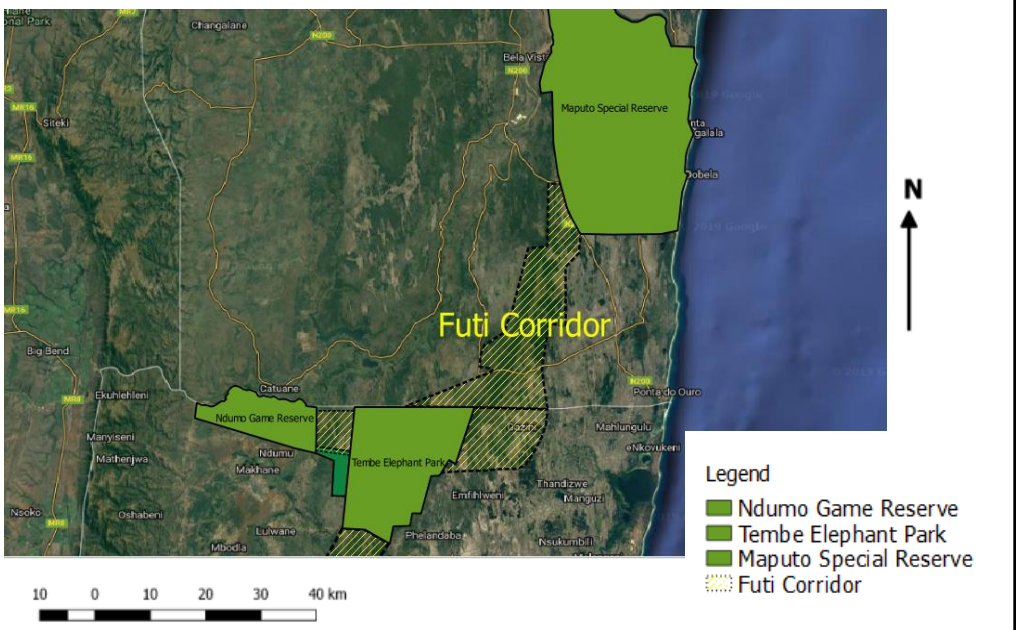
government's demarcation of the Mbangweni area also contributes to the government's perception of the landscape i.e. that Mbangweni can only comprise of the land within its allocated boundary.



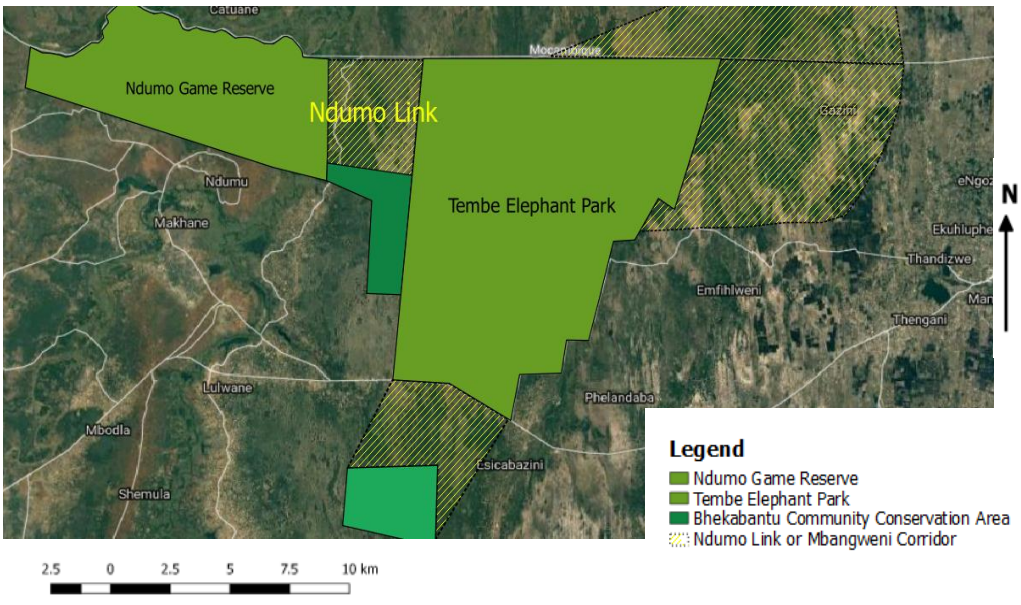
Map 14. Dominated Space showing Demarcation of Mbangweni Area

ii. Dominated Space: Conservation Interventions

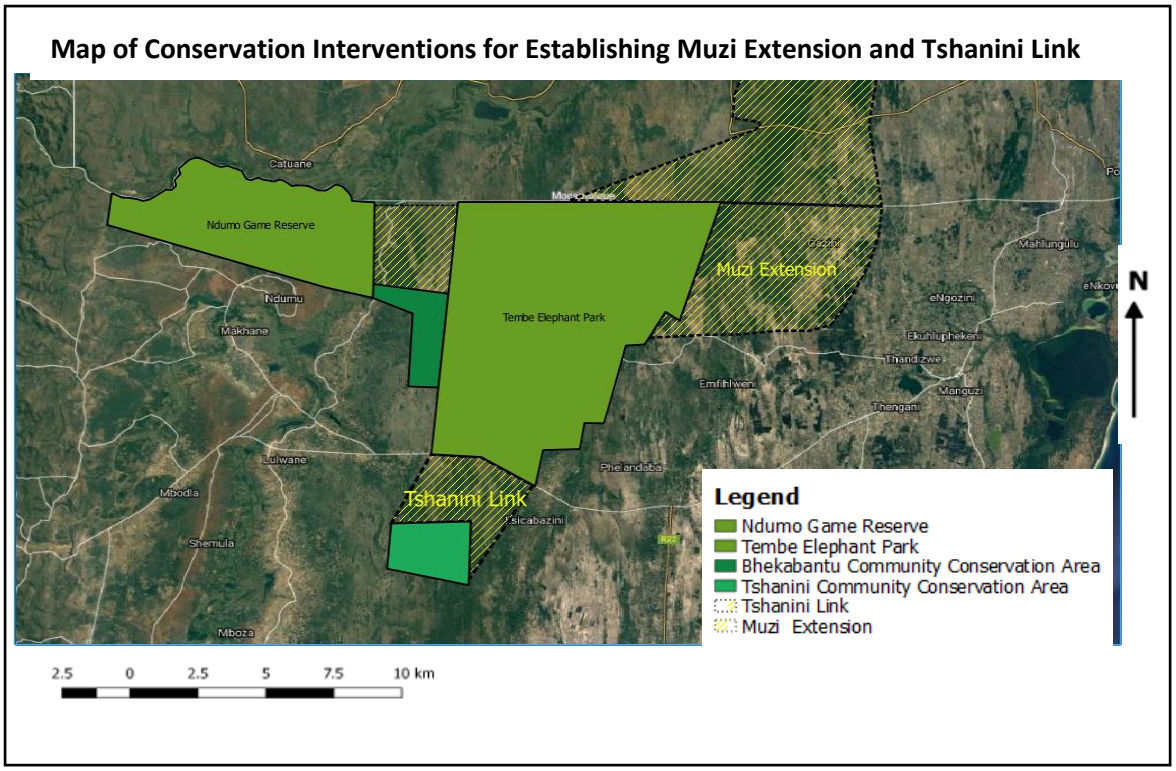
Conservation interventions are visible through the creation of the nature reserves and the corridors that link the reserves to each other and to community conservation areas (CCAs) (Map 16), (Map 17), (Map 18). These interventions are for the primary purpose of natural resource conservation and are reflective of the nature conservation institution's main perception and understanding of the transboundary landscape. This landscape is dominated through nature conservation interventions that are currently working toward establishing the Ndumo-Tembe-Futi Transfrontier Conservation Area (NTF TFCA) (Map 16). This TFCA looks to link the Ndumo Game Reserve to the Tembe Elephant Park through the Mbangweni Corridor (or Ndumo Link) (Map 17). Both nature reserves would, therefore, be linked to the Maputo Special Reserve in Mozambique through the already established Futi Corridor thus creating the NTF TFCA. Moreover, nature conservation interventions have also seen the establishment and proposals for the establishment of the Tshanini Link which links the Tembe Elephant Park to the Bhekabantu CCA as well as the Muzi Extension which is an extension of the Futi Corridor (Map 18) (Ezemvelo KZN Wildlife, 2009). These conservation plans and physical interventions highlight that the nature conservation institutions view nature conservation as the primary purpose of this transboundary landscape.



Map 15. Conservation interventions for the proposed Ndumo-Tembe-Futi TFCA.



Map 16. Conservation interventions for linking the Ndumo Game Reserve to Tembe Elephant Park through the Mbangweni Corridor (Ndumo Link).



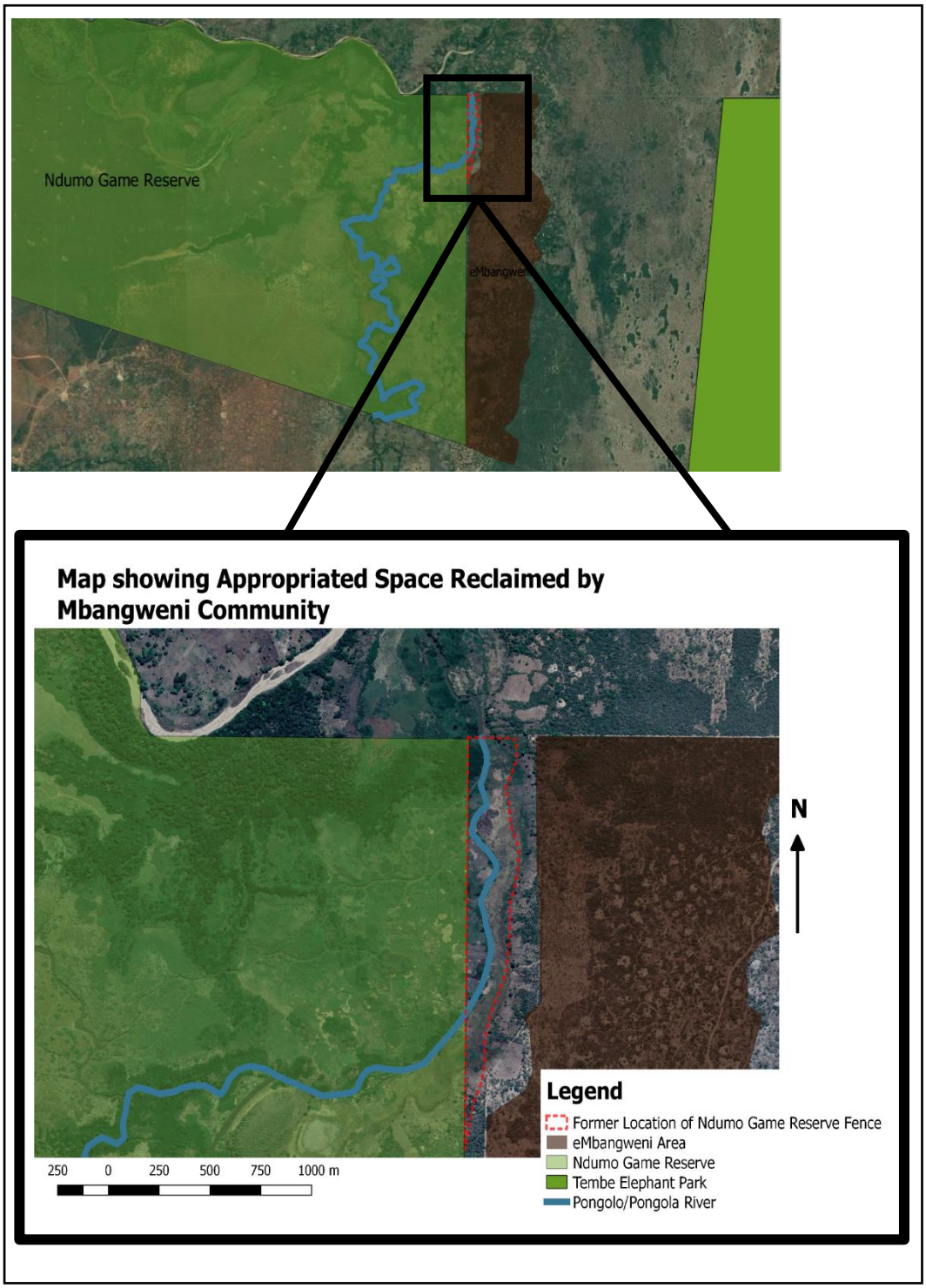
Map 17. Conservation interventions of the establishment of the Tshanini Link and the Muzi Extension.

The boundary demarcations placed by the government demarcating the area to be occupied by the Mbangweni community as well as those placed by the nature reserves demarcating the corridors to be implemented and those already existing has negative implications on the livelihoods of the Mbangweni community. This perception of the landscape does not fit with the perception and livelihood needs of the Mbangweni community. The boundary of the Mbangweni corridor overlaps the boundary of the Mbangweni community. If the corridor were to be implemented, it would result in the forced removal of the people of Mbangweni. This would have obvious negative and disruptive implications on the livelihoods of the Mbangweni community.

iii. Appropriated Space

Lefebvre's (1991; 2008) description of appropriated space reflected by the Mbangweni community's modification of parts of the landscape to fit their needs. An example of one such an action is the tearing down of the Ndumo Game Reserve fence which had closed off access to the community's fertile communal crop farming lands (Map 19). When the game reserve's fence was initially put up, it became a site for much conflict between the people of Mbangweni and the game reserve. The conflict arose from the community feeling that they had had their land taken away from them which greatly compromised their livelihoods. The portion of the land that had been closed off by the section of the fence that was torn down included fertile flood plains along the Pongola river as well as the river itself. These flood plains, fertile grounds and the river had been used by the community for many years in the past for agricultural practices that contributed to their livelihoods. Having these grounds and the river closed off by the Ndumo Game Reserve boundary/fence threatened the livelihoods of the Mbangweni community and they, therefore, sought to forcefully reclaim this land (Groenewald, 2010; Louw, 2010). Moreover, the people of Mbangweni have appropriated this landscape through their tendency to continue to follow their own social and cultural norms paying little to no mind to the nature conservation

policy and legislative frameworks imposed on them. This reflects that the community understands the landscape as belonging to them and their livelihoods more than it belongs to nature conservation. The community's perception of the landscape is that of a space that should primarily serve their livelihoods.



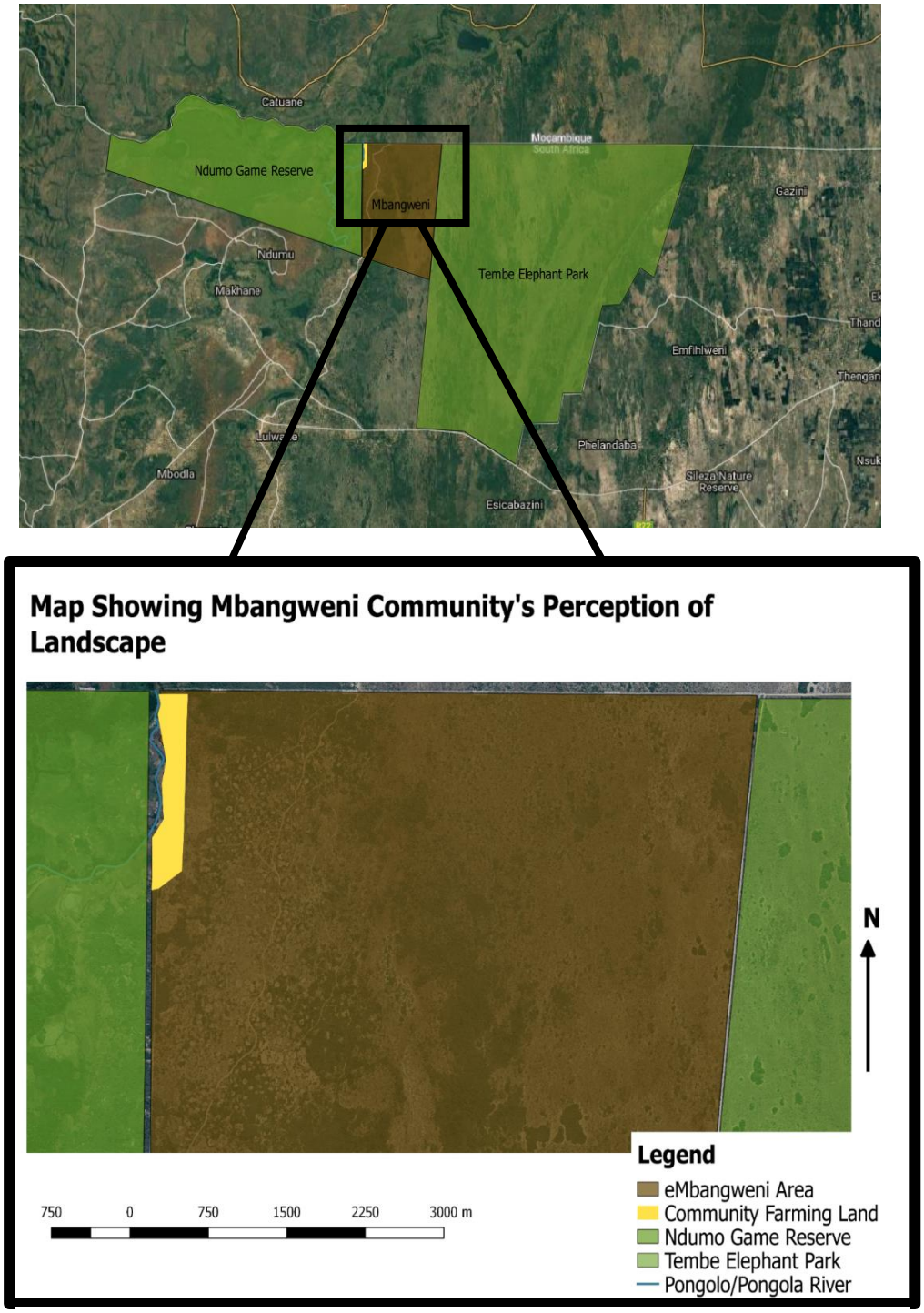
Map 18. Portion of the landscape reclaimed by the people of Mbangweni from the Ndumo Game Reserve.

Lived Space

The people of Mbangweni hold a perception of the landscape that may differ from the perceptions held by the local government and the nature reserves nearby. This perception was expressed by the community members through by mapping out the features of the landscape they occupy as they understand and view them (Map 20).

Map 19. Map of landscape draw by Focus Group 2 showing the community's perception of the landscape they occupy

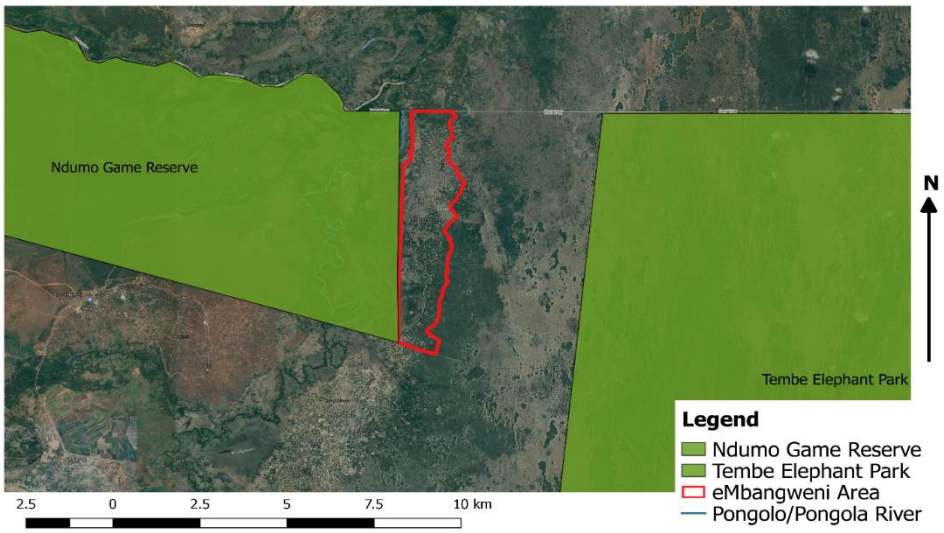
The features mapped by the by the community members express their views on the importance of this landscape. As those who experience this landscape at the ground level, the perception mapped by the community members also expresses the lived reality and everyday life of the landscape. The features that are most important and have significant impacts on the livelihoods of the people of Mbangweni include the land on which they live, the communal farming grounds (Amasimu), the Pongola River as well as the nature reserves adjacent to them (Map 21). The people of Mbangweni hold a simple perception of their landscape and understand it to be one that serves the primary purpose of sustaining their livelihoods. They have, therefore, established livelihood patterns such as farming at the communal farming grounds/land and frequently using the water from the Pongola River to sustain their livelihoods. This has naturalised the existence of this lived space as one that holds and supports human life and not only nature conservation.



Map 20. Perception of landscape held by the people of Mbangweni.

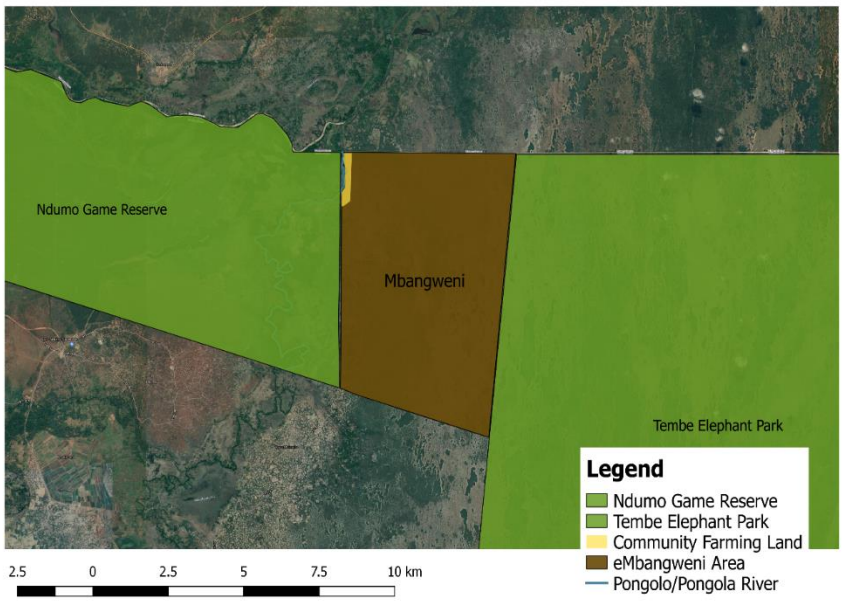
Another important aspect of the lived space portrayed by the community members is the misrepresentation of the landscape they occupy. The boundary/demarcation of the area determined by the local government and the nature conservation suggests that only a portion of the land in between the NGR and TEP belongs to the people of Mbangweni (Map 22 below). However, the residents of this area counter this by expressing that the entire area of land between NGR and TEP belongs to the Tembe Tribal Authority and, therefore, to the people of Mbangweni (Map 23 below). This misrepresentation could have potential consequences for the people of Mbangweni should the TEP want to extend their territory westward. This expansion would potentially lead to an encroachment on the land that the Mbangweni community believes is theirs. This is another realisation of the lived reality that this rural community faces.

Conservation and Local Government's Representation of Landscape Occupied by Mbangweni Area



Map 21. Map showing conservation and local government's representation of

Mbangweni Community's Representation of the Landscape It Occupies



Map 22. Mbangweni community's representation of boundaries and location of the

The appropriation of the landscape and the lived space created by the people of Mbangweni have had somewhat positive implications on the livelihoods of the Mbangweni community. The appropriated space of Lefebvre's framework has worked to create a lived space that fits the needs of the Mbangweni community.

The conceived and perceived spaces of the transboundary landscape are established through the governance images that the local or national government and the conservation authority's build regarding the landscape and areas that they govern. The issues that arise from this are that the conceived and perceived spaces do not match the lived realities or lived spaces of the Mbangweni community. The way in which the community interacts with the landscape and its resources, on a daily basis, is not taken into consideration when conservation authorities or local and national government plan their governance strategies. Therefore, the national or local government and the conservation authorities construct their own ideas and images of what the landscape can be used for. Their perceptions, as governing institutions, are also often mismatched. The mismatch in perceptions of the landscape has negative implications on the livelihoods of the Mbangweni community.

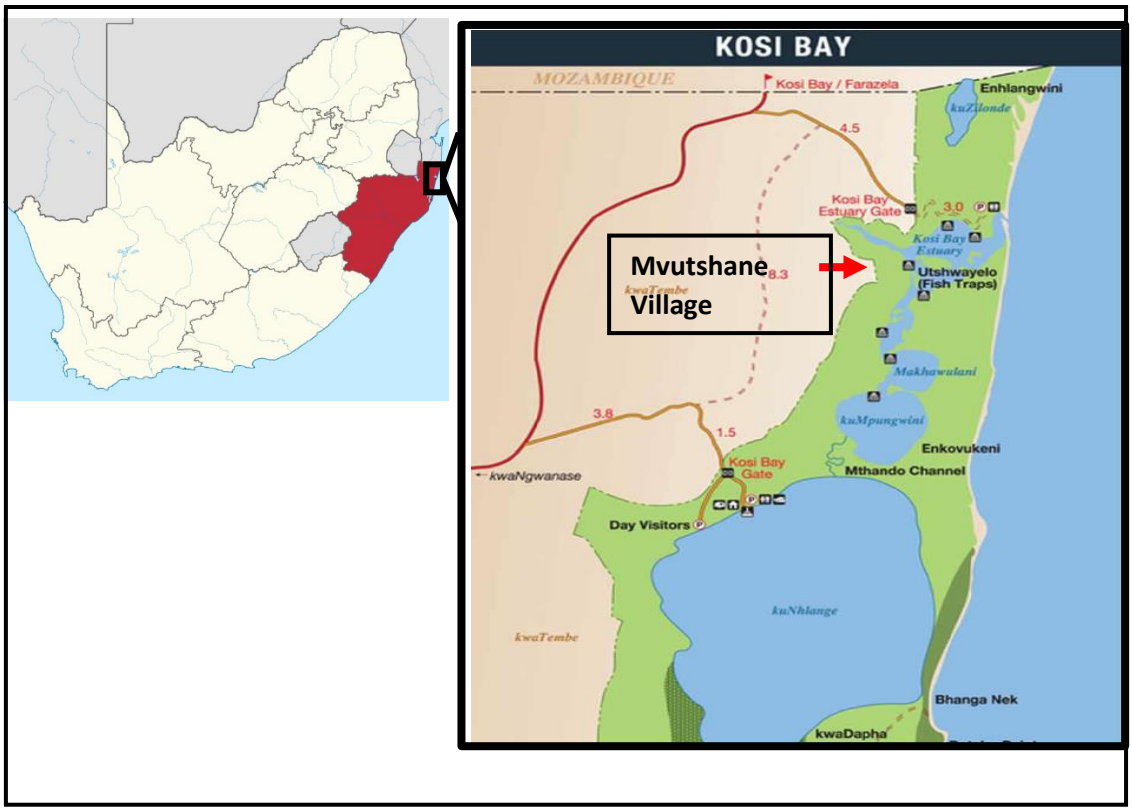
6.3 Implications of Transboundary landscapes and nature conservation on rural livelihoods

The establishment of a border between South Africa and Mozambique during the colonial period disrupted the livelihoods of the communities that had been living in the area where the border was placed (Mayoral-Philips, 2002, Thakholi, 2016). These livelihoods were further disrupted by the establishment of nature conservation sites near this border. The land that was once accessible to the rural communities living there now had strict laws and rules imposed on it. This greatly reduced and cut off the access that rural communities had to the resources and land space that was enclosed within those nature conservation sites (Mayoral-Philips, 2002).

The introduction of a national border in Northern KZN disregarded the fact that population groups that existed as a single group would be separated and confined or restricted to one side of the border (Thakholi, 2016). Furthermore, Jentoft *et.al* (2010)'s concept of governance images is illustrated again in this case. The colonial government had an agenda of separating Africa into different states. By doing so, the colonial government formulated an image of where these states would be and where the borders would be (Mayoral-Philips, 2002). The implications of this move by the colonial government were felt more by the population groups that were separated from their resources, families and land spaces. The inability to stop the establishment of the border or overcome its impacts threatened the sustainability of the rural communities' livelihoods. To remain sustainable, the communities living along the border would have had to be able to immediately counter the effects and consequences of being cut off and

separated from their livelihood resources and social networks on either side of the border (Scoones, 1998; 2015). Unfortunately, the disregard of the communities' livelihoods by the colonial governments meant that the livelihoods of the communities were disrupted.

The area along Northern KZN had several communities that were negatively affected by the establishment of a border between South Africa and Mozambique. The area occupied by Mbangweni has population groups that once lived and moved between South Africa and Mozambique to sustain their livelihoods and social networks. The community of Mbangweni was, therefore, constrained to the South African side of the border once it had been established by colonial governments. However, there is evidence that Mbangweni is not the only community to have been negatively impacted by the establishment of the border. The rural villages of Kosi Bay, such as Mvutshane, along the coast of Northern KZN (Map 24 below) were also cut off from their livelihood activities and resources when the colonial government established the border (Mbatha, 2018). The livelihoods of the people of Kosi Bay were disrupted due to a governance image formed by the colonial government of the states of Africa. This image did not match the systems employed by the local Kosi Bay residents to conduct their livelihoods (Mbatha, 2018).



Map 23. Location of Mvutshane village (Kosi Bay) and iSimangaliso Wetland Park in South Africa. Source: Mbatha, 2018 and isimangaliso.com /product/map-isimangaliso-wetland-park-)

The implications of a border separating communities from each other and separating communities from their livelihood resources are exacerbated when nature conservation is also involved or introduced into the landscape. The implications of nature conservation as a method of managing the landscapes are also felt by the communities near the conservation sites. Fangli *et. al.* (2018) and Ramutsindela (2014) determine that rural communities adjacent to nature conservation sites and, simultaneously, a formal local or national border have a high risk of being cut off from essential livelihood resources.

Institutions mediate livelihoods and in the case of Mbangweni, the direct impacts of a border and conservation sites existing simultaneously near this community can be seen. The border restrains the Mbangweni community to one side of the border. This means that access to resources very limited or prohibited. This is made worse by the existence of two nature reserves near the community. These nature reserves have not decreased the amount of space that the community can occupy in addition to limiting and prohibiting access to natural resources historically used for livelihoods. The concepts of conceived space and governance images are reflected again in the landscape occupied by Mbangweni, NGR and TEP. The conservation authorities have understood the landscape as one that serves the primary purpose of nature conservation whilst neglecting the lived realities of the Mbangweni community. Furthermore, the conservation authorities have created an image of the landscape being a predominantly nature conservation-focused landscape. This image does not match with the reality of a community living near the conservation sites.

The establishment of a border, in Northern KZN, by the colonial government had and continues to have negative implications on the livelihoods of the Mbangweni community. These implications are made worse by the existence of nature conservation sites near the community that have restricted access to the community's livelihood resources. Nature conservation perpetuates the exclusionary agenda and further adds to the negative implications of colonial borders (Ramutsindela, 2014; Fangli *et. al.*,2018). This is evident in the isolation and exclusion of the Mbangweni and Kosi Bay communities from the political and conservation plans of the colonial government who established the border, the current national government who continues to enforce the border and the conservation authority.

6.4 Need for governance interactions and bricolage

Institutional bricolage arises from the deliberate establishment and development of institutions that fit the specific needs and particular functions. These institutions, as Cleaver (2000) suggests, may be multi-purpose and exist to simultaneously promote both intermittent and robust management as well as be an integral part of social relations whilst being subject to continuous negotiation. Institutional bricolage, therefore, conceptualises the borrowing and reconstruction of mechanisms for governance and resource

management from multiple existing sources such as existing institutions, styles of thinking, social identities and social relationships. Moreover, institutional bricolage encourages active processes of adapting norms, values and social arrangements to fit new purposes (Cleaver, 2000).

Establishing and developing bricolage processes would involve negotiating and facilitating creative processes at the local level rather than imposing new 'best practice' top-down techniques. Fostering a deeper understanding of the institutional landscape and social processes amongst the various governing institutions and entities occupying a landscape can help build institutions that provide communities with the necessary support to improve their livelihoods and well-being (Merrey & Cook, 2012). Transboundary landscapes that are simultaneously occupied by nature conservation sites and borders can pose a threat to the livelihoods of local communities. These institutions or entities could operate in isolation to each other and also disregard the livelihood needs of the local community if they do not work in cooperation with each other and with the community's livelihoods. If institutions operate in isolation from each other, the goals and mandates of those institutions will always differ from and will, therefore, oppose and overlap each other (Merrey & Cook, 2012). This is true for landscapes simultaneously governed by national or local government and conservation government. The governance image(s) that each institution has built of the landscape will determine how each institution goes about governing over the landscape. If institutions do not share the same perception or governance image of the landscape, then the livelihoods of the local communities stand the risk of being further disregarded (Jentoft *et. al*, 2010). Therefore, institutions must work together to govern over an area and provide the needs of the community they serve. To do this, all-accommodating institutions, with a focus that is shifted onto simultaneous poverty alleviation, livelihood development and nature conservation, will have to be created. These institutions can be created through fostered bricolage.

To successfully foster bricolage amongst institutions, it is important for interactive governance to be implemented and achieved. Kooiman & Bavinck (2013) define interactive governance as the interactions between governance realms. They emphasise that these interactions are an important factor in the success or failure of whatever governance system is put in place (Kooiman & Bavinck, 2013). Kooiman (2003) and Kooiman *et. al.* (2008) add to the conceptualisation of interactive governance and refer to it as a concept in which the quality of the way a 'system-to-be-governed' and a 'governing system' can be considered jointly. Furthermore, Kooiman *et.al.* (2008) indicate that interactive governance highlights the interactions between entities belonging to specified societal or government parties (Kooiman *et. al.*, 2008).

Jentoft *et. al* (2010) and Jentoft and Bavinck, 2014 suggest a concept called governance images which can be linked to institutional bricolage. The creation of institutions that serve the needs of all the relevant entities can be created when local or national governing institutions and conservation authorities have

a similar image and understanding of the landscape. If governance realms interact with each other as suggested by Kooiman & Bavinck (2013), then institutions with similar mindsets, governance images and mandates can be created (Kooiman et.al., 2008).

The nature conservation institution that oversees and manages the natural resources in the transboundary landscape occupied by Mbangweni serves the primary purpose of nature conservation through the Ndumo Game Reserve and the Tembe Elephant Park. Much of this institution's mandate is focused on preserving and protecting natural resources and animals in the area (Ezemvelo KZN Wildlife, 2018). This intense focus on nature conservation could be exclusionary toward the livelihoods of the rural communities with which the nature reserves share a landscape. A clash of perceptions and views between the Mbangweni community and the nature reserves is evident in this landscape. The objectives of the nature reserves and their governing institution, Ezemvelo KZN Wildlife, to establish and develop the Ndumo-Tembe-Futi TFCA that would be linked via a corridor between NGR and TEP has caused an uproar from the Mbangweni community. This nature conservation-driven TFCA proposal has excluded the livelihoods of the Mbangweni community from its plans and objectives. The Mbangweni community would be subjected to further resource and land restrictions should the Mbangweni corridor and the NTF TFCA be established, the livelihoods of the people of Mbangweni would be threatened. Furthermore, as a nature conservation-focused institution and entity, the nature reserves and EKZNW maintain the primary land use of the landscape as a place for nature conservation. The natural resources inside the nature reserves, now inaccessible to the people of Mbangweni, the lack of community consultation as well as the minimal contribution to poverty alleviation from the nature reserves has led to conflicts arising between the people of Mbangweni and the NGR and TEP. The nature reserves and the associated conservation authority, EKZNW, have the potential to foster bricolage in their operation and main objectives. By reconstructing their institutional arrangements, these entities could be reconstructed to serve and fit the specific needs of the community while maintaining focus on nature conservation. Through understanding and adopting the social processes and patterns, the values and norms of the Mbangweni community and the traditional authority within this area, the nature conservation institutions could become all-accommodating institutions. By changing the governance image that EKZNW may have of the transboundary landscape, it may have the potential to positively interact with the traditional authority as well as the local or national government.

Furthermore, although not as strict as it used to be in the past, the laws and policies governing the border between South Africa and Mozambique could also be adjusted to foster bricolage. Adjusting the laws of the border to accommodate the livelihoods of the Mbangweni community, by allowing them to freely cross the border, would create a governing institution

that upholds the order of political borders but at the same time allows for rural livelihoods to continue to thrive.

The institutional arrangements and entities that govern and exist in the landscape occupied by NGR, TEP and Mbangweni possess the potential for fostering bricolage. The Mbangweni community's livelihood needs could be accommodated by the institutions that govern the area and the nature reserves. Likewise, nature conservation can be accommodated by the community's functions and the governing institutions. The traditional authority's primary objective is to serve the people of Mbangweni and other rural communities nearby. This institution's main mandates and goals serve to develop and protect the community's livelihoods and, where these livelihoods are concerned, is subject to continuous negotiation and minor adjustments when the Mbangweni community's needs change. Contrastingly, where nature conservation is concerned, the traditional authority as an institution has potential for adjusting its governance mechanisms to be more inclusive of nature conservation. By aiming to serve, simultaneously, the Mbangweni community and the nature reserves' needs, this institution could be recreated into an all-accommodating institution.

Through changing the silo and isolation-natured behaviours of the institutions governing this transboundary landscape the new institutions can be built to simultaneously fit the needs of the different entities and institutions existing in this landscape. Adjusting the way in which these entities and institutions fit, interact and interplay with each other will determine the how much bricolage must be fostered in each entity/institution to create a landscape that sufficiently serves each of the entities' needs.

6.5 Conclusion

Transboundary landscapes are complex spaces that have various entities and multiple layers of governing institutions. Different entities contribute in various ways to the livelihoods of the communities occupying the landscape. This research project found that the main contributors in this transboundary landscape are the Mbangweni community, the traditional government, the local government as well as the nature conservation authorities/ nature reserves that are located within this landscape. This chapter unpacked the conflicting perceptions of the transboundary landscape and how these perceptions are derived from spaces conceived by policy, documents and conservation plans; perceived through physical interventions from the colonial and national governments; and lived by the Mbangweni and Kosi Bay communities. Moreover, this chapter looked at the implications of transboundary landscapes and nature conservation on rural livelihoods. Finally, the chapter looked at how negative implications of transboundary landscapes and nature conservation can be avoided by

fostering bricolage through interactive governance and a shift in the governance images created by national or local government and conservation authorities.

Chapter 7: Conclusion and Recommendations

Transboundary landscapes are the result of colonialism and have persisted to the present-day. These landscapes, created through the establishment of political borders separating states, have had and continue to have varying impacts on the livelihoods of rural communities nearby. Borders separating states play an important role in how rural livelihoods are conducted around and, at times, across them. Furthermore, the establishment of national borders has provided opportunities for the linkage of entities across these borders to create transboundary areas. Such is the case with the establishment of transboundary nature conservation areas. These transboundary nature conservation efforts connect nature reserves in different countries to each other. These transboundary nature reserves, created for the primary purpose of nature conservation, introduce challenges and restrictions to the livelihoods of the rural communities nearby. This study discussed the effects and challenges of a community's existence in a landscape that is also occupied by both political and conservation borders. To do this, the study employed the frameworks of institutional fit, interplay and bricolage as well as Lefebvre's spatial triad of conceived, perceived and lived space. These frameworks were adopted to get a sense of how the different entities occupying the landscape view, understand and use the landscape and, thus, how those perceptions, understandings and uses of the landscape fits or interplays with each other. The study saw it beneficial to use these frameworks in combination as the outcomes of one framework (Lefebvre's spatial triad) can be used to analyse the situation or outcomes of the other framework (institutional fit, interplay and bricolage. By understanding how the landscape has been conceived, perceived and used by the different entities, the study can understand if the institutions fit and interplay with each other and where they don't, if there is potential for institutional bricolage. The use of these frameworks in combination meant that the data to be collected needed to reflect how the nature conservation institutions understand and use the landscape, how the formal local government and traditional authority view and understand the landscape and how the people of Mbangweni view, use and experience the landscape.

The study used the rural community of Mbangweni to understand and further enhance the understanding of the complexities of a transboundary landscape and, thus, addressed the objective of using the Mbangweni case study as a lens to make sense of the nature of transboundary landscapes, drawing on the perceptions of local people.

The study found the important role players and contributors in the transboundary landscape in the northern KwaZulu-Natal and southern Mozambique (Maputaland) area. The findings of the study revealed that this landscape is occupied by several rural communities and two major nature reserves. The study also revealed that the key institutions contributing laws, policies and governance in the area included traditional authority, nature conservation governance structures as well as municipal governing institutions.

The national border separating South Africa and Mozambique is itself a key entity that impacts the structure of this transboundary landscape as well as the livelihoods of the rural communities that exist right next to it. The introduction of this border led to the separation of population groups that were forced to live and remain on either side of the border whereas, before it was introduced, they had freely moved around this landscape. This study revealed that today many local people still conduct livelihood activities across the border. The study was, therefore, able to address and meet the objective of determining and document the historical and current transboundary livelihood practices of the people of Mbangweni

The study found that there is a great disregard for the livelihoods of the Mbangweni community. This is evident in the fact that the local and national governments continue to enforce the laws of the border. Although the border has some porosity to it now, it still inhibits, to a large degree, the free movement of people across the border to access the resources they need to sustain their livelihoods. This finding contributed to the study addressing the objective of determining the manner in which government actors and conservation authorities perceive and conceive of the transboundary landscape in the Mbangweni area. Moreover, the study found that adding conservation sites to this landscape has complicated the livelihoods of the Mbangweni community. These nature reserves have worked to perpetuate the legacies of the colonial borders that sought to separate and isolate communities from each other. In addition, more of the community's land space is taken up by the nature reserves and more of the natural resources they historically used for their livelihoods are now enclosed within the boundaries of the nature reserves. Therefore, nature conservation in this area exists as a competitor to the livelihoods of the rural community with which it shares the landscape. The failure to recognise the damage caused by silo-natured institutions will allow for the alienation of rural communities to continue. By recognising that institutions and authorities must work together to perceive the landscape in a similar manner, the isolation of rural communities in transboundary spaces can be avoided. This finding helped the study meet the objective of determining whether or not (and to what extent) local and government perceptions about the transboundary landscape in Mbangweni are similar, and if not, how that affects livelihood activities on the ground.

Perhaps more studies are needed on the implications and impacts of transboundary landscapes and nature conservation on rural communities in southern Africa. Further studies are also needed to investigate the specifics of how institutional bricolage can be successfully fostered and sustained in transboundary landscapes.

Overall this thesis has potentially made theoretical and empirical contributions to the theories and literature that already exists by attaching a case study that uses the community's rural livelihoods, lived experiences and perceptions as a lens through which the complexities of a transboundary landscape can be come about. This thesis uses the unique case study of Mbangweni to reflect on the disruptive and

negative implications of trying to build a transboundary landscape through nature conservation in a siloed and fragmented landscape occupied by different entities each perceiving the landscape differently and prioritising different needs or uses of the landscape.

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