

**MANGALANE COMMUNITY'S PERCEPTIONS OF POVERTY AS A
FACTORS INFLUENCING INVOLVEMENT IN RHINO POACHING:
A CASE STUDY OF MOZAMBIQUE**

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*Thesis presented in fulfilment of the requirements for the degree of Master of Philosophy in
Environmental Management in the Faculty of Economic and Management Sciences at*

Stellenbosch University



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April 2019

DECLARATION

By submitting this thesis electronically, I declare that the entirety of the work contained therein is my own, original work, that I am the authorship owner thereof (unless to the extent explicitly otherwise stated) and that I have not previously in its entirety or in part submitted it for obtaining any qualification.

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ABSTRACT

Illegal wildlife trade (IWT) involves the illicit purchase, movement and exchange of wildlife specimens as commodities within and across national boundaries. The illicit trade of wildlife is one of the largest threats to the survival of species, including rhinoceros and elephant populations in the wild, and has negative implications on the stability of national economies. Literature states that the limited research at different levels of the illicit chains makes the trade difficult to disrupt. On the one hand, scholars argue that poverty is a driver for involvement in illegal wildlife. On the other hand, some scholars suggest that IWT is driven by growth of wealth in the consumer countries in south-east Asia thus raising the demand for illegal products. This paper aims to understand the socio-economic drivers motivating poor communities, such as Mangalane in Mozambique, to become involved in IWT. The purpose is to understand the community's perception to identify some key challenges that research conservation projects have not explicitly addressed. Ultimately, this paper contributes to understanding some intervention gaps from the perspective of the community to address IWT.

The participants were randomly selected but excluded persons under the age of 16 years as they are regarded as minors according to Mozambique law. The study acknowledged the sensitivity of rhinoceros poaching issues which may challenge the reasoning capacity of minors or threaten their social security. A total of 119 surveys were collected of 480 households (25%) from four out of five villages of the Mangalane community located in Mozambique near the southeast border of South Africa's Kruger National Park (KNP). A participatory focus group session followed to assist in explaining some of the findings to ensure that the community participated in the interpretation of data.

The study found that poverty of income has negative implications on wildlife, but mainly wildlife that is necessary for substance consumption, or trade, to supplement household income. The poaching of high value species such as rhino has no immediate use for the community, yet some individuals are involved. Although the community may be collectively defined as poor, poverty levels differ within one community and there are also more affluent individuals within a poor community. These affluent members are more likely to participate in poaching as one must be resourced to participate in poaching. Generally, poor people do not like poachers because they threaten the social security of the community as poachers are

also linked to other crimes in the community such as cattle theft and human trafficking. Poor people like wildlife, however, the community's tolerance of wildlife is very low when the cost of living with it exceeds the benefits received therefrom. The community also expressed a strongly felt need to be granted natural resource use rights. The community is positive towards the protected area and policies, but has a problem with the way policies are implemented, arguing that they are biased toward certain members of the community who are repeat offenders but are allowed to return to the community without prosecution. Furthermore, policies are enforced and not communicated resulting in conflict between law enforcement officials and community members. The community is willing to work with park rangers, but argue that they also need to support safety and security in the community as the community also assists in reporting poaching suspects.

In conclusion, poverty is not the absolute motivator for involvement in IWT. Rather, poaching can be a result of a political protest for the use of natural resource and the lack of understanding of conservation laws and retaliation against protected areas due to unfulfilled promises. The absence of proactive human-wildlife conflict management strategies demotivates the community from reporting suspected illegal activity. The investment in anti-poaching raises curiosity within communities about the value of rhino horn in that protected areas make huge investments for protective measures and criminal syndicates are prepared to die to access rhinoceros horn, but the local community is deprived of the wealth. Local communities do not take likely to poaching or poachers, but what is good for wildlife, such as security, must also be good for the community. Wealthy criminal syndicates create fear and social unrest within the community. Fundamentally, under capacitated and under resourced law enforcement officials perpetuate negative relationship between the community and the protected area as they are unable to respond to safety concerns in the community. Apart from benefiting from wildlife, HWC has to be reduced and people must be able to enjoy the protected area so that they understand what they are protecting. Protected areas are at risk of being globally relevant and locally irrelevant as local communities are unable to enjoy the facilities on a daily basis. The researcher urges the consideration of reintegrative shaming approaches which aim to reintegrate offenders as good members of society through positive communication and respect while acknowledging wrong doing.

OPSOMMING

Onwettige wildhandel (IWT) behels die ongewettigde aankoop, verskuiwing en verhandeling van spesies wilde diere, as handelsware, binne en oor nasionale grense. Die onwettige handel met wild is een van die grootste bedreigings vir oorlewing van spesies, insluitende renoster- en olifantbevolkings in die natuur, en dit hou ook negatiewe implikasies vir die stabiliteit van nasionale ekonomiese in. Dit staan op rekord dat die beperkte navorsing op verskillende vlakke van dié ongewettigde handelsketting dit moeilik maak om die handel te ontwrig. Aan die een kant redeneer ingeligtes dat armoede die dryfveer vir betrokkenheid is, maar aan die ander kant teen sommige weer dit is te wyte aan die toename in rykdom in die verbruikerslande in suidoos Asië dat die aanvraag na onwettige produkte die hoogte ingejaag word. Hierdie studie probeer om begrip aan die dag te lê vir die sosio-ekonomiese dryfvere wat arm gemeenskappe, soos Mangalane in Mosambiek, motiveer om by IWT betrokke te raak. Die doel is om begrip te toon vir die gemeenskap se persepsie om een of ander sleuteluitdaging te identifiseer wat navorsingsbewaringsprojekte nie duidelik aangespreek het nie. Per slot van rekening dra hierdie studie by tot begrip van sommige intervensiegapings, gesien uit die perspektief van die gemeenskap, om IWT aan te spreek.

Die deelnemers is lukraak gekies, maar diegene onder ouderdom 16 is uitgesluit aangesien hulle volgens wet in Mosambiek as minderjariges beskou word. Die studie het die sensitiwiteit van renosterstropingsaangeleenthede erken wat moontlik die redenasievermoë van minderjariges kan aanroep, of hulle maatskaplike sekerheid kan bedreig. Altesaam 119 opnames is in vier dorpe van die Mangalane-gemeenskap gedoen, wat teen die suidoostelike grens van Suid-Afrika se Kruger Nasionalepark in Mosambiek geleë is. Deelnemende fokusgroepe was byderhand om hulp te verleen met die breedvoeriger verduideliking van sommige van die bevindings om sodoende te verseker dat die gemeenskap deel was van die interpretasie van data.

Die studie het bevind dat tekort aan inkomste 'n negatiewe implikasie op wildlewe het, maar hoofsaaklik op wildlewe wat vir substansie-verbruik, of handel om huishoudelike inkomste aan te vul, benodig word. Die stroop van spesies van hoë waarde, soos die renoster, het geen onmiddellike gebruik vir die gemeenskap nie, hoewel sommige individue wel daarby betrokke is. Hoewel die gemeenskap in die geheel as arm beskou word, verskil armoedevlakke binne een gemeenskap en daar is ook meer welgestelde individue binne 'n

arm gemeenskap. Daar is 'n groter waarskynlikheid dat hierdie goeide lede deel sal hê aan stropery aangesien finansiële vermoëndheid daarvoor 'n noodsaaklikheid vir stropery is. Oor die algemeen hou arm mense nie van stropers nie, aangesien hulle sosiale sekuriteit binne die gemeenskap bedreig en ook met ander geringer misdade, soos beesdiefstal, verbind word. Arm mense hou van wild, maar die gemeenskap se toleransie daarvoor is baie laag wanneer die lewenskoste om daarvan saam te leef die voordele wat daarvoor ontvang kan word, oortref. Die gemeenskap het ook 'n sterk behoeftrengte vir die gebruik van natuurlike hulpbronne uitgespreek. Die gemeenskap hou van die beskermde gebied en beleid, maar het 'n probleem met die wyse waarop die beleid toegepas word. Hulle voer aan dat hulle bevooroordelik teenoor sekere lede van die gemeenskap is, wat gewoonte-oortreders is en toegelaat word om na die gemeenskap terug te keer sonder dat vervolging ingestel word. Die gemeenskap is grotendeels tevrede met veldwagters, maar meen dat hulle sterker behoort te staan teenoor veiligheid en sekuriteit in die gemeenskap aangesien die gemeenskap hulle kant bring met die uitwys van verdagte stropers.

Ten slotte, armoede is nie die absolute motiveerde vir betrokkenheid by IWT nie. Stropery kan eerder die gevolg wees van politieke protes om regte vir die gebruik van natuurlike hulpbronne. Die besteding aan teen-stropery maak nuuskierigheid binne gemeenskappe gaande oor die waarde van renosterhoring, aangesien in beskermde gebiede reuse-besteding met die oog op beskerming gedoen word. Misdaadsindikate is bereid om te sterf ten einde toegang daartoe te verkry terwyl die plaaslike gemeenskap van die rykdom ontnem word. Daarbenewens word misdaad deur die hoë inkomste-ongelykhede tussen beskermde gebiede en plaaslike gemeenskappe bevorder. Plaaslike gemeenskappe hou nie van stropers en stropery nie, maar wat vir die wildlewe voordelig is, soos sekuriteit, moet ook vir die gemeenskap voordelig wees. Benewens voordeel uit die wildlewe, moet HWC (*Human Wildlife Conflict*) verminder word en mense moet in staat gestel word om die beskermde gebied te geniet sodat hulle begrip het vir wat hulle beskerm.

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ACKNOWLEDGEMENTS

First of all I would like to thank my career development mentors and colleagues, Dr Joanne Shaw and Miss Joeline Barnato, who have been supportive from the first day I became part of the WWF South Africa. Thank you for your never ceasing support and encouragement and the exposure you have given me.

Professor Brian Child, thank you for your tireless guidance and encouragement since I started talking about the intention to study further. I appreciate mostly the knowledge sharing, expertise and training.

Thank you to the Southern African Wildlife College staff, Dr Alan Gardiner, for funding support by way of the NORHED scholarship without which this thesis would not have been possible, as well as support during data collection.

I also wish to thank the Rural Initiative for a Sustainable Environment for their unreserved technical support; Sboniso Phakathi, Martha Themba, Linda Hlengwa, Elna De Beer and Vutomi Mnisi who assisted with collecting the data.

A special thank you to Zanele Mathonsi for her excellent translation skills who translated science for ordinary people to understand in their own language.

I wish to extend the most unreserved appreciation to Sabie Game Park and the Mangalane community for allowing me into their midst and assisting me to learn how to share such valuable knowledge with other conservation and social development practitioners.

A special thanks to Natalia Banasiak for her editing contribution, technical advice and being an amazing colleague. I have learnt so much from you because of your willingness to share information.

Dr Annette Hübschle, thank you for the technical advice in this sector and your willingness to teach and grow my expertise.

To my beloved son, in whom I am well pleased, Luyanda Jernel Vundla, you have always been the brightest light in my heart that has kept me going from strength to strength. You have taught me so much about unconditional love, patience and perseverance. When I felt like giving up, I saw your smile that said carry on mom, you are almost there.

Without my family, Thuleleni, Nokubonga, Sboniso, Ntombizodwa, Zanele Vundla, Thembelihle and Adelaide Mavimbela, my academic career would not have begun, your love and support helped me to progress in life. I am immensely proud to be part of such an amazing family.

My friends who are my family away from home, Sibusiso Khuzwayo, Sisanda Mayekiso, Lumka Madolo, Kholosa Magudu, Linda Hlengwa, Samantha Sithole, Ntokozo Ngobese and Bonga Zuma, life is amazing with you in the world. Thank you for cheering me on.

Now to Him who is able to do immeasurably more than all we ask or imagine, according to His power that is at work within us, the immeasurable, uncircumscribed, invisible God, You are worthy to be praised! Glory be to the most high for orchestrating my life.

DEDICATION

In the beginning was the Word, and the Word was with God, and the Word was God, John
1:1.

To my beloved son, Luyanda Jernel Vundla, in whom I am well pleased, always keep your
smile and cheerful demure and aim to do one kind thing for someone you don't know.
Always put God first in every thought and every action. Above all, always be yourself
because no one can be a better you than YOU.

I love you Bana Bibi.

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LIST OF ABBREVIATIONS

\$US	United States Dollar
CAR	Central African Republic
CBNRM	Community-Based Natural Resource Management
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
DNA	Deoxyribonucleic acid
DRC	Democratic Republic of Congo
FEC	Foundation for Environmental Conservation
FRELIMO	Mozambique Liberation Front
HWC	Human Wildlife Conflict
GDP	Gross Domestic Product
GPS	Geographic Positioning Systems
HO	Heckscher-Ohlin
IUCN	International Union for Conservation of Nature
IWT	Illegal Wildlife Trade
NGOs	Non-Government Organisations
RENAMO	Mozambican National Resistance
SADC	Southern African Development Community
SAWC	South African Wildlife College
SADF	South African Defence Force
SGP	Sabie Game Park
UK	United Kingdom
UN	United Nations
USA	United States of America
WWF SA	World Wide Fund for Nature South Africa

CHAPTER 1

INTRODUCTION TO STUDY

1.1 INTRODUCTION

The African black rhinoceros (*Diceros bicornis*) and white rhinoceros (*Ceratotherium simum*) species are amongst the most charismatic mega herbivores and the most endangered wildlife species threatened by the illegal wildlife trade. During the past 30 years, the total number of black rhinoceros declined by 96% while the white rhinoceros have steadily improved (Emslie and Brooks, 1999). The prevalence of rhinoceros poaching escalated in the mid-2000s as a consequence of growing middle class consumers in southeast Asian countries. The cost of protecting these species, amongst others, comes at an exuberant rate for African countries and sustainable use mechanisms are being investigated to ensure that revenue is ploughed back to improve security.

Duffy and St John (2013:4) state that poverty can be directly or indirectly linked to illegal wildlife crimes, such as poaching. Poverty alone is an insufficient claim as a primary factor driving illicit wildlife crime; rather it can be viewed as a consequence of a growing gap between the rich and the poor. Additionally, poverty and conservation have two different policy needs and attention, but conservation must not promote poverty as poverty hinders conservation.

Income related to poverty is common amongst people residing around protected areas. Social scientists have found that poverty encompasses complex dimensions which include, but are not limited to, social inferiority, isolation, physical weakness, vulnerability, seasonal deprivation, powerlessness and humiliation (Chambers, 1995:173). Therefore, the purpose of this study is to understand socio-economic factors motivating people to be involved or not involved in illegal wildlife trade, using poverty as an explanatory mechanism.

Chapter 1 provides an introduction to the research and providing a rationale for the study in question, as well as the research design. Chapter 2 provides the poverty conceptual framework and literature review relevant to this study. Chapter 3 will explain the methodology and an overview of the Mangalane community as the study area. Chapter 4

provides the analysis of data collected and chapter 5 is the discussion and recommendation. Chapter 6 provides an overall conclusion to the study.

1.2 Background to illegal wildlife trade

On a global scale, illegal wildlife trade (IWT) is the largest challenge facing the international community in enforcing environmental laws through the Convention on International Trade in Endangered Species of Wildlife Fauna and Flora (CITES) treaty. According to Vand and Transnat (2003) IWT has attracted interest of various criminal syndicates with advance networks making IWT the second largest criminal network in the world. Community-based conservation approaches, where people living in and around protected areas are allowed to benefit from wildlife, is suggested by scholars such as Holmes, 2003; Munthali, 2007; and Gruber (2008) as one of the techniques that could be adopted to protect rhinoceros and other wildlife.

The term ‘illegal’ denotes the unregulated and unconsented use or access, in this case to rhinoceros horn. However, West *et al.* (2006: 257) argue that the concept of illegal wildlife trade is directly related to the reorganisation of land to establish protected areas. Protected areas in their view restricted and redefined natural resource use rights thereby excluding people from their livelihood base. Redefining land use and access contributed to the criminalisation of local communities through the use of legislation, enforcement and privatisation (West *et al.*, 2006:257).

Munthali (2007:53) concurs with the above stating that the restricted access of local people to benefit perpetuates resentment amongst many southern African communities neighbouring protected areas. Hence the concept of ‘illegal’ use is only relevant to conservationists and protected area managers, and not the local communities (Munthali, 2007:53).

Since the establishment of the first protected area, Yellowstone and Yosemite Parks in the United States, conservation has become intertwined with the designation of land to protect species by removing, evicting and displacing indigenous local communities (Rowcliffe *et al.*, 2004:2631). Tourism income was the primary interest of protected areas as a national symbol (Paavola, 2004:60).

Similarly, in most parts of Africa, perceptions and attitudes towards conservation or protected areas remain negative due to historical colonial impacts of centralisation of wildlife resources (Mbaiwa and Stronza, 2011:1951). The negative impacts of protected areas mentioned above are exacerbated by growing human populations around protected areas, increasing demands for ecosystem services and emphasising the inability of local governments to adequately meet development needs of the locals (Alexander, 2000:341).

According to White (2013:456) the inheritance of colonial military practice in protected areas, in sub-Saharan Africa, is linked to the obscure stereotype of African cultural practices and the relationship between society and nature is convoluted by the notion of white supremacy to legitimise the use of military force against hostile local communities. Without disregarding the extent of complexity of environmental challenges, Marijnen and Verweijen (2016:278) raise the concern of continued Western dictation on environmental security problems in Africa and the continued security intervention claiming ability to bring about law and order.

Irrespective of the perceived outcome of militarization of protected areas, the notion of national security remains questionable and requires further analysis. A study conducted in Zambia by Gibson and Marks (1995) showed two critical assumptions made by paramilitary policies: (1) that rangers are willing to enforce wildlife laws and (2) that rangers are increasing the cost of hunting, thus reducing the benefits accrued therefrom (Gibson and Marks, 1995:942). However, the decline in living standards of rural communities adjacent to protected areas disproved the abovementioned assumptions as wildlife remained highly valuable, especially during drought seasons (Gibson and Marks, 1995:943).

According to Reiss (1986:1) individuals in a community can commit crime and can be victims of crime through direct or indirect involvement. Pantazis (2000:414) states that people are generally fearful of crime; but women, children, poor people and elderly are more fearful than others. Pantazis (2000: 416) rejects the notion that poor people like crime as they experience a higher degree of fear towards crime, including poaching and that the fear experienced by poor people is generally beyond their capacity to respond due to limiting factors namely social, environmental and economic. Moreover, Liska and Chamlin (1984:388) caution that crime evaluations must consider crime as an individual act and not that of a collective.

Poverty has been cited by a number of authors as the main factor influencing rural communities in becoming involved in illegal wildlife trade. On the contrary, Duffy (2016:239) argues that growing wealth in Asian countries creates the demand for illegal wildlife products, while poor people become easy targets for recruitment by crime syndicates. In addition, poverty does not only refer to lack of access to income, but also lack of life development opportunities. Hence rural communities, who lack alternative livelihood opportunities, seek other means through wildlife products inside protected areas for household protein substitute – for instance, bush meat products which are traded on traditional medicine markets.

Knapp *et al.*, (2017:24) argue that rural communities living around protected areas are unlikely to support conservation if conservation does not meet the basic needs of local household livelihoods. Knapp *et al.*, (2017:24) further state that if a community adjacent to a protected areas lack access to basic human needs and economic opportunities to uplift their livelihoods, then they will continue being involved in wildlife poaching. This is because poaching has the potential to improve a household economic status, even though it is high risk and threatens wildlife numbers and tourism opportunities.

One could argue that income deprivation poverty also creates similar criminal patterns for individualistic societies where the ‘end’ justifies the ‘means’. For the disadvantaged, life threatening situations call for desperate measures to an extent that members of threatened households seek means to supplement their livelihoods as survival strategy. Equally arguable is that it is within human instinct to consider survival before the ramification. However, Chalim and Cochran’s (1997:206) counter argues that providing economic means alone is insufficient to redress ethical anomalies in societies that disregard self-worth. Ideally, a successful community is built on recognising an equal standing for economic gain and impressing ethical values from an altruistic perspective.

Community-based natural resource management became a prominent rural development approach in the 1980s to involve rural communities in development issues by conserving natural resources on which they depend (Sebele, 2010:137). The key principle is that people are more likely to conserve wildlife if they are able to extract benefits. This became a

favourable alternative to the traditional exclusionary ‘fences and fines’ approach (Holmes, 2003:305).

Conservationists around the world are struggling to understand why poaching, as one of the elements of illegal wildlife trade chains, continues to occur irrespective of intensified law enforcement and community-based approaches being implemented to protect wildlife. Although poverty has been identified as a development problem, the components of poverty make the issue difficult to understand and address.

1.3 PROBLEM STATEMENT

According to Ripple *et al.*, (2016:1) the combination of illegal hunting, competing land-use for livestock and habitat loss, are some of the biggest threats to the survival of large mammals, including rhinos. In addition, the unsustainable hunting (also known as poaching) of iconic species such as elephants and rhinoceros to be traded on international markets through organised crime syndicates is the largest threat to the species survival (Ripple *et al.*, 2016:3). Literature on illicit wildlife crimes has generally focused on responses to poaching incidences by developing new strategies for apprehending poachers (Hauck and Sweijd, 1999:1025), forensics and DNA sampling (Wasser *et al.*, 2008:1065) and temporal mapping of poaching incursions to predict poachers’ entry points into protected areas (Gandiwa *et al.*, 2013:135). Criminology scholars have also explored the transnational organised crimes (Warchol, 2004:59) and describe illegal wildlife trade as a highly organised criminal network. Criminologists have also compared the similarities between illegal drug trade and IWT (South and Wyatt, 2010:539). Yet, much is assumed about IWT participants and non-participants motivation to commit, or not commit, crime either than the value of rhino horn or ivory on the black market. The lack of understanding of the IWT networks, according to Hübshle (2016:196), makes it difficult to disrupt. Therefore it is important to gain understanding of communities living adjacent to protected areas through which syndicates operate.

Poaching is a complex, context-specific issue that is threatening the survival of wildlife around the world. The continued advancement of technology used by criminal syndicates and the complexity in classifying poachers, make the chain difficult to disrupt. Income related poverty is being constantly cited as a factor motivating poor rural communities to becoming

involved in illegal wildlife trade. Illegal wildlife trade does not only refer to trans-boundary transfers, but also includes provision of information to syndicates by local communities and the social networks of the people involved. Due to context relatedness of poverty definitions, understanding motivations is determined by the local community's experience and definition of poverty. What needs to be understood are the factors that influence individual decision-making.

According to Knapp *et al.*, (2017) the successful inclusion of people in conservation efforts lies in the ability to understand human behaviour and social influencers. While 'people and parks' programmes have become popular in conservation sector in the past twenty years, little has been achieved towards practical inclusive conservation as a result of top-down approaches.

Literature suggests that people's economic status is the main driver for involvement in illegal wildlife trade. Scholars such as Duffy *et al.*, (2015) argue that the growing middle class income in Asia has driven the increase in demand for animal products as a status symbol. Similarly, the rise in rhino poaching suggested due to the high levels of poverty resulting from loss of access to livelihoods, poor service delivery and high social status aspirations (Vand and Transnat'l, 2003).

However, the latter argument suggests that all community members are involved in poaching disregarding the fact that not all people have the skills to poach, not all members are recruited and there are not enough rhinos to poach by all community members. This study aims to investigate the typologies of poverty that influence involvement in illegal wildlife trade.

1.4 SIGNIFICANCE OF THE STUDY

One of the largest conservation successes in the twenty-first century would be to disrupt the illegal wildlife trade chain. The chain starts with poaching in protected areas, mainly facilitated by local communities and ends with the consumer countries as a result of demand by wealthy middle class income citizens. This study contributes to understanding the poverty as a factor motivating poor rural communities to become involved in poaching in various ways. Untangling the complexities of poverty drivers enables conservationists to address gaps between themselves and the local community will enable reserve managers to better plan community outreach projects. This is a critical step to co-develop incentives and disincentives involvement in illegal activities by specifically targeting poverty influencers.

The complexity of the IWT leads the author to assert that, although perceptions do not provide strong statistical analysis, or an absolute reflection of reality as it is subjective, what people perceive to being ‘true’ coincides with people’s decision-making processes which translate into their actions and response to a situation. Therefore, understanding people’s perceptions can help scientists understand behaviour patterns and analyse situations to predict probable outcomes based on behaviour patterns. In addition, behaviour is shaped by social norms, customs and acculturation, and survival strategies.

1.5 AIM AND OBJECTIVES

The aim of the study is to explore the push and pull factors motivating involvement in illegal wildlife trade. This will be achieved by;

- a) To examine the Mangalane community’s perceptions social factors influencing involvement in rhino poaching
- b) To examine the Mangalane community’s economic factors influencing involvement in rhino poaching
- c) To determine Mangalane community's acceptance or rejection of rhino poaching

1.6 HYPOTHESIS

- a. Poor people like to poach
- b. Poor people like poachers
- c. Poor people detest park rangers
- d. Poor people detest park policies
- e. Poor people detest wildlife

1.7 RESEARCH DESIGN

A mixed methods case study research approach is utilised in this study through the use of close ended questions where participants respond on a Likert scale and participation of the community in a data analysis process. The study is based on an epistemological view of the community’s experience and perspective of poverty as a motivating factor for involvement in illegal wildlife trade. This approach allows the researcher to examine the sample group’s patterns, actions and words which begin to tell a story.

The surveys were conducted over a period of five days in four villages of the Mangalane community (Mavunguana, Constine, Ndindiza and Mukakaza). Participants were randomly requested to voluntarily participate in the survey at the end of a monthly village meeting. A total 119 of 480 household heads participated in the survey representing 25% of the total households of the Mangalane community.

The forms were collected, shuffled and reallocated to participants who were then asked to raise their hand according to the corresponding question and answer to tally the data. The participants then participated in analysing and explaining the data.

1.8 ASSUMPTIONS AND LIMITATIONS

Literacy levels of the community are significantly low and there exists the possibility that the respondents may not have followed answering questions accurately. The results are not based on reality, but people's perceptions which may also be influenced by personal relations with the protected area.

1.9 CONCLUSION

Chapter 1 has provided an overview of the research paper and explains the background to the problem of illegal wildlife trade experienced by protected areas and challenges experienced by local communities. The challenges experienced by protected areas regarding the management of wildlife and growing human population continue to challenge wildlife management approaches that are socially acceptable. Social scientists argue that local communities are still experiencing exclusion from benefits from protected areas. The exclusion perpetuates poverty and resentment of protected areas observed in the form of poaching. The study is envisioned to contribute to greater understanding of grassroot challenges motivating decisions of local communities to become involved in illegal wildlife trade. This chapter also explains the significance of the study and offers a summary of the participatory methodology used in this research to account for low literacy levels. Chapter 2 will expand on literature debating factors of exclusion of local communities motivating their involvement in illegal wildlife trade.

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

This section presents multi-poverty as a conceptual framework against which factors motivating poaching is assessed. It also reviews how the literature perceived poaching and illegal wildlife trade and proposes more radical controversial solutions that protect wildlife by improving community safety and benefits for communities. Social altruism is also discussed as a theme that is commonly overlooked in addressing illegal wildlife trade.

2.2 CONCEPTUALISING POVERTY

There is no universally agreed definition for poverty. Measures and approaches to defining poverty include a variety of perspectives such as social, cultural and historical matters (Sen, 1990:23) and should also be defined by the society in question.

Poverty definitions range from instrumental and material to multi-dimensional and social. For example, Townsend (1979:188) defines poverty as “the inability to participate in society” (which is broader than more ‘absolute’ definitions confined to subsistence needs), but emphasizes that what is distinctive is the “inability to participate owing to lack of resources”. However, this definition is limited to issues of economic accessibility that enable one to participate in society. The United Nations (UN) attempts to extend Townsend’s definition to include words such as “lack of participation in decision-making, a violation of human dignity, powerlessness and susceptibility to violence” (Townsend, 1979:31).

Ringen (1988:146) argues income related definitions of poverty are too simplistic as they view income as an end in itself rather than a means to an end. Ringen (1988) suggests that the definition must also consider the low standards of living associated with lack of income. Atkinson (1989) concurs with Ringen (1988) but advocates for the ‘right’ to access to minimum resources/income. Atkinson (1989) argues that if citizens have the right to access minimum income, then the ‘poverty’ dimensions mentioned above by Townsend (1979) would be addressed. Millar and Glendinning (1989) suggested that poverty should also be

viewed from a perspective of individual rights to economic independence, the lack of results in poverty vulnerability.

Sen (1990) rejects the definitions above, arguing that income will always be a means to an end. Access to income does not necessarily result in access to a desired end, and Sen argues that poverty is a consequence of the inability to make choices or freedom. Sen suggests that poverty definitions must explicitly present social inequalities that limit an individual's capabilities, such as gender, politics, and racism amongst others. Sen (1990) adds that human beings must be supported with the means to enable them to make choices about what they can do and become. Sen's definition of poverty is a fundamental component of human development in developing countries.

Sen's (1990) attributed Karl Marx (1847) argument, but warned that disregarding income related poverty disregards the power dynamics associated with income. The more income an individual has the more power of influence they have over a society. Income and power inequalities may lead to elite capture and subsequent impoverishment, and dependency of those who have less income.

Sen (1990) states there are two types of poverty: absolute and relative poverty. Absolute poverty refers to the inability of an individual to meet basic human needs. It is associated with the physical needs for survival that will enable one to work for remuneration and reproduction. This approach is strongly linked to access to nutrition and food security, and not income variances. A family or society is defined as being in absolute poverty if they cannot afford to eat.

Relative poverty is the lack of access to material resources that are required for an individual to participate in society. Relative poverty includes both social (participating in society) and material (income related). The comparative state of relative poverty exists when comparing people in the same society and at the same point in history. Thus, comparative relative poverty is complex to apply and generally deviates from the basic question of human needs. However, it can explicitly reveal the inequalities in a society such as racial, gender, class, and amongst ethnic groups.

This study recognises poverty as an explanatory mechanism that affects many households in the Southern African Development Community (SADC) region. The negative impacts of poverty include: food insecurity, vulnerability to crime, elite capture and environmental and political injustice. Being affected by poverty may result in individuals being participants in illegal wildlife trade and victims of both law enforcement and criminality associated with illegal wildlife trade. Poverty, as an explanatory mechanism, can be used to understand people's decision making processes to choose to participate, or not participate, in illegal wildlife trade, or its prevention.

The section below presents other factors that scholars say contribute to involvement in illegal wildlife trade such as the historical injustices of protected areas, the negative consequences of protected area establishment, human wildlife conflict, and debate relating to wildlife protection strategies between the poles of green militarisation and community wildlife ownership.

2.3 ESTABLISHMENT OF PROTECTED AREAS

Depending on how they are managed, protected areas can contribute to the impoverishment of local communities through the redefinition of land ownership, land use rights, reduced access to resources and subsequent criminalisation of local practices, or alternatively, they can be managed as engines of economic growth providing jobs, promoting CBNRM and treating local people with respect and dignity.

A 'protected area' can be defined as "an area of land and/or sea especially dedicated to protection and maintenance of biological diversity and of natural and associated resources, and managed through legal, or other effective measures" (IUCN, 2000:3). Occupying about 12% of the earth's surface area, protected areas have become an integral part of conservation strategies to protect high biodiversity habitats for species, carbon sequestration and threatened water source areas (Sims, 2010:94). However, the impacts of protected areas remain highly contested.

On the one hand, protected areas can contribute to local development by attracting tourism investment opportunities resulting in employment for local communities (Sims, 2010:96).

However, the tangible benefits accrued from protected areas are different between developed and developing countries and tend to be higher where there is strong public accountability (Child, 2014). In addition, protected areas can safeguard the ecosystem to benefit local communities through fresh water supply, forest products, fishing and increasing local income by means of tourism.

On the other hand, protected areas can worsen poverty for rural communities who are mainly dependent on the environment to supplement their livelihoods. Through reorganising land and regulating access, legislation forbidding natural resource use and redefining land ownership and rights, create negative impacts of protected areas on local communities as what was once local goods and resources, are now state and private assets, inversely without compensation. Protected areas can also restrict future development opportunities, thus limiting potential economic growth. This statement is particularly true if the benefits of that protected area are experienced at a regional or global level disregarding the needs of the local communities. Nonetheless, there are considerable potentials to re-consider the governance of parks, and to invest in them as engines for economic growth (Child and Jones, 2006).

Paavola (2004:68) argues that the establishment of protected areas did not recognise the interest of local communities or consider social justice. He argues that any type of conservation effort should consider both distributive and procedural justice in decision-making processes. Distributive justice draws from the Bentham philosophy of the greatest good for the greatest number. Hence, distributive environmental justice considers the impacts of conservation on the population dependent on the natural resource. Procedural justice (which aims to achieve fairness in resolving conflict related to resource allocation) advocates for inclusion and distribution of power to all affected parties in environmental decision-making processes. Procedural justice enables the affected parties to provide consent or reject environmental decisions (Paavola, 2004:68). Paavola (2004:68) advocates for social justice in environmental management rather than simply focusing on economic and species welfare. In addition, Paavola (2004:72) argues that failure of contemporary conservation practice is due to the failure to address historical issues of distributive and procedural justice.

Holmes (2003:309) asserts that conservation crimes can be viewed as a political protest against what is seen as an unfair regulation. In his journal, Holmes (2003:310) states that the impacts of imposing new property rights and redefining land ownership regulations,

excluding people from livelihood resources such as hunting wildlife and harvesting firewood, subsequently criminalising (known as poaching) an activity that was once legal, and a way of life (i.e hunting and gathering) and using military force to enforce these regulations, are not received by the local community passively. For example when Yellowstone Park was created in the United States of America, local people protested the new land demarcation through violence, arson, destroying park infrastructure, threatening the lives of game rangers and killing wildlife (Holmes, 2003:310).

Economies of many African societies were and still are dependent on the natural environment. Hence, the exploitation of Africa's natural resources contributed to the colonisation of African societies (Nelson, 2010:3). Colonialism resulted in institutional change, such as users and communities, in the way natural resources were governed, shifting control over wild resources, from localised accountable resources users to centralised public authority, including parks, wildlife and park agencies and institutions (Nelson, 2010:9). Consequently there are prevailing conflicts over land rights and tenure, and access to resources and competing land use amongst local, private and global communities. In other words, there is conflict between public assets – parks and wildlife – that affect or reside on private and community land.

Land tenure in many Africa countries, including Mozambique, is very complex. Though the land is the property of the state, traditional authority and private entities have land use rights. However, the allocation of land use rights remains unclear as private economic interest often supersedes that of local Mozambiquans, especially communities. While local people may have their own interest to utilise natural resources, such as water to meet their household needs, these are commonly reserved to meet the needs of urban dwellers with little or no allocation to the rural communities living in water source areas. Similarly, rural communities living with wildlife have no rights to utilise wildlife, yet they bear the costs of living with wildlife.

Kideghesho *et al.*, (2007:2219) state that human wildlife conflict generally requires communities to bear the costs of livestock and crop losses for the sake of protected areas and state owned wildlife. Resentment grows as authorities fail to consult communities in the development and management of protected areas as there is reduced grazing land for

livestock, decline in livestock, increased susceptibility to wildlife diseases, exclusion of access to natural resources, and theft (Kideghesho *et al.*, 2007:2219).

In Mozambique, competing land use between game reserve wildlife and community livestock and crop farming, have continued since the 1980s. This includes restricted access to ancestral lands, and unequal distribution of rights to natural resources. Community protest against the game reserve can be observed in the form of negative attitudes towards wildlife (Soto *et al.*, 2001:1735) and sometimes protest through poaching and fires – the weapons of the weak (Scott *et al.*, 2008). It is thus important to ensure that communities have access to basic needs, and existing livelihoods are not compromised for the sake of wildlife conservation.

Near South Africa's Kruger National Park, Hübschle (2016) found that the historical conflict and disparities caused by the establishment of protected areas remain unacknowledged and influences uptake of the wildlife economy and concerns in illegal wildlife trade. In addition, the continued exclusion of local people and exuberant investment in law enforcement, perpetuates negative attitudes towards protected areas, with local people believing that the authorities consider wildlife to be more important than human lives. Moreover, the lack of racial transformation of the wildlife economy continues to exclude local people from benefitting from wildlife, rather than being passive recipients of 'benefits' determined by protected area management. To research trends that cause social exclusion and resentment, conservationists need to adopt more people-centred approaches that address the historical socio-political injustices.

2.4 CONCEPTUALISING WILDLIFE CRIME

The section below illustrates how poverty related to change in decision-making powers influences involvement in illegal wildlife trade. The argument here is that the change in land ownership resulted in redefinition of hunting practices, regulations and defining legal and illegal hunting (poaching).

Hunting has been a common livelihood practice in African communities, including trade, household protein diet needs, cultural practices and ecosystem balance. The arrival of colonialists during the nineteenth century, redefined the social standing of African society as

uncivilised, and reconfiguring social norms and practices, including the use and access to wildlife resources. Subsistence hunting was thus characterised as “haphazard, inefficient, wasteful and cruel” and the development of a new order of acceptable and appropriate licensed sport and trophy hunting, which still prevails today, was established (White, 2013:456). Consequently, colonial, post-colonial elites and NGOs, through protected areas, redefined land use and ownership rights by dictating “what hunting should entail, by whom it should be conducted and with what methods” (White, 2013:456).

The unauthorised hunting by the local communities in protected areas is regarded as poaching. The term, poaching, has become synonymous with undocumented hunting by neighbouring communities encompassed as ‘illegal’ and unsustainable hunting practice. There are two different types of poachers referred to in this paper namely, subsistence poachers and commercial poachers.

Subsistence poachers commonly hunt small wildlife, such as antelopes, mainly to supplement for household food needs, as well as for local sales and trade. Subsistence poachers have limited access to technology and mostly hunt using traditional methods such as traps and snares. However, the use of these technologies can affect other wildlife. Lindsey *et al.*, (2013:88) state that due to the seasonality of tourism employment, poor rural Africans partake in snare hunting to substitute household food needs, as well as for trade to supplement household income. Other factors, including poor soil quality for crop farming and livestock disease such as trypanosomiasis, contribute to the demand for bush meat due to scarcity, hence snaring. In addition, Lindsey *et al.*, (2013: 88) state that the lack of land rights, or ownership, contributes to snaring as neighbouring communities see it as the only way they can benefit from wildlife, the cost of which they have to endure. Consequently, charismatic species such as elephants are unintentionally caught or injured.

Many rural households in Africa that suffer from lack of sustainable employment opportunities, source income alternatives from bush meat by hunting and selling (Lindsey *et al.*, 2013:88). In addition, seasonal employees have more time for hunting than those in full time employment (Lindsey *et al.*, 2013:88). Moreover, household food insecurity is exacerbated by poor agricultural and arable land, and thus people survive on bush meat as an alternative protein substitute. Livestock disease has also been identified as a major contributing factor to livestock decline, yet livestock is retained as household assets/wealth

and used for dietary needs. Bush meat in the Serengeti National Park in Tanzania contributes about 31% of protein for households (Lindsey *et al.*, 2013:88). Therefore, reduction in bush meat will negatively impact household food security should sustainable harvesting mechanisms not be initiated.

Bush meat products are not only for household consumption, but are also traded on local medicinal and cultural markets. Species such as leopards or vultures have higher economic value on the traditional medicine market than as household food. Trading wildlife parts such as lion bones on the traditional medicine market is highly profitable for households who have limited development opportunities. In addition, the increased need for household food increases demand for income and income generating opportunities. Often, the lone distinction between subsistence hunting, selling wildlife products for household needs, and commercial poaching by mid-level and high-level criminals, is blurred and we now refer to the latter as commercial poachers.

Commercial poachers usually hunt in formally organised groups aiming for highly valuable wildlife that sells on the international market, such as elephants and rhinos. They use more modern and sophisticated methods of tracking and hunting, including guns, geographic positioning systems (GPS) and helicopters. These types of poachers have detrimental impacts on the survival of species in the wild.

Generally associated with commercial poachers, illegal wildlife trade is a concept that overlaps with transnational crime defined as “the illicit procurement, transportation and distribution of commodities across international borders” (Warchol, 20014:58). Hence, ‘illegal’ wildlife trade is the illicit harvesting, procurement and transportation of wildlife specimens. The ‘illegal’ trafficking of wildlife species, both flora and fauna, is worth between \$91-billion and \$258-billion annually (Van der Merwe, 2016).

The term ‘illegal’ denotes unregulated and unauthorised use or access, in this case to natural resources. However, West *et al.*, (2006:257) argue that the concept of illegal wildlife use/trade is directly related to the reorganisation of land to establish protected areas. Protected areas in their view restricted and redefined land use rights, mainly excluding people from their livelihood base. Redefining land use and access criminalises local people through the use of legislation, enforcement and privatisation (West *et al.*, 2006:257). Munthali (2007:53) concurs with the above stating that depriving local people from accessing wildlife

usually to benefit the elite, resonates amongst many southern African communities neighbouring protected areas. Hence the concept of 'illegal' use is only relevant to the agenda of the elite (Munthali, 2007:53). At local level, misusing wildlife may be regarded illegal, but it is often de facto socially legitimate in the face of the law that favours the rich and in which the poor have little say. Similarly, international treaties such as the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) often ignore their effects of international ban on range states that are successfully conserving wildlife.

The researcher agrees with the above, arguing that prior to colonisation, Africa had functional stewardship approaches to utilising wildlife to meet household needs such as the Makhulela, Ndolwane, Huwana, Gala, Bambadzi, Hingwe and Madlambudzi in Bulilimainangwe district in Zimbabwe (Madzudzo, 1997). The redefinition of local communities as poachers, the complexity of attaining hunting permits and the lack of perceived benefits continue to exacerbate resentment of the effects of protected areas. In addition, local communities do not have access to modern formal education systems to occupy managerial positions in protected areas to afford themselves an opportunity to be involved in decision-making processes. Moreover, protected areas around the world are subjected to international policies of elite countries that make decisions for these areas recognising only biological science as legitimate, with little or no consideration of the social implications. In other words, banning trade of certain species is an indication of conservation and law enforcement failure.

White (2013:462) states that poachers and poaching have negative impacts on society. Poaching and illegal wildlife trade undermines opportunities for good governance and management of natural resources, loots economically valuable natural resources, creates instability of national economies, perpetuates corruption, undermines local livelihoods, and introduces criminal gangs and lawlessness.

According to White (2013:461) there has been a shift from defining poachers as poor peasant farmers with subsistence tools for hunting to include new identities that are more sophisticated and form part of highly organised syndicates. The advancement of criminal syndicates includes multinational trade routes around the globe facilitated through globalisation and advanced weaponry, transportation networks and geographic positioning systems (White, 2013:461).

Wasser *et al.*, (2008:1066) confirm that the prosecution rate for illegal wildlife trafficking is very low as it is considered by law enforcement officials as a low priority crime compared to other transnational crimes such as human trafficking, drug and weapon smuggling amongst others. Wasser *et al.*, (2008:1066) agree that there is empirical data showing a network link between illegal wildlife trade and other transnational crimes. In addition, modernisation and development of technology are making it even more difficult to apprehend offenders as trade is done via internet transactions.

2.5 ADDRESSING WILDLIFE CRIME

More than US\$350 million have already been spent around the world to protect and monitor ‘illegal’ wildlife trade of rhino horn and elephant ivory (Biggs *et al.*, 2016:2). More recently, engaging communities living around protected areas have been identified as critical components to addressing ‘illegal’ wildlife trade (Cooney *et al.*, 2016). The London Declaration held in 2014 aimed to develop strategies to address illegal wildlife crime under the broader theme of removing illegal wildlife products in the legal market, developing new frameworks for law enforcement and deterrent strategies, and providing incentives to contribute to livelihoods and development. The FEC (2015:354) states that these approaches are unlikely to succeed as more information is required regarding the link between poverty and poaching, as well as the impact of growing wealth in the consumer countries.

While there is growing recognition of the need to involve communities in addressing poaching and illegal wildlife trade, most projects, targeted as alternative livelihoods, have been involved in food gardens, education and establishing field ranger programmes (McNeely, 1993). One can argue that these projects have been focused on the symptoms of poverty resulting from lack of land use rights. They do not address the problems of land use rights, wildlife ownership and natural resource use rights. Fundamentally, governance is a critical component to enable the abovementioned rights to be fulfilled, and the lack of understanding of the definition of community in African societies and continued top-down approach, hinder progress. Moreover, states are reluctant to devolve power to local communities. Instead, huge funds continue to be allocated to anti-poaching operations while communities receive superficial development projects that do not represent the interests of local communities.

FEC (2015:346) further argue that policy responses to poaching are generally linked to issues of global security as a transnational crime. Rowcliffe *et al.*, (2004:2631) and Massè and Lunstrum (2016) agree that the zoning of protected areas through the use of fences is a method of enforcing laws based on a theory that resource users will willingly conform to this change, thus leading to illegal behaviour. Rowcliffe *et al.*, (2004:2631) further argue that fences to enforce laws also contribute to the decline of less valuable species outside the protected area.

Paavola (2004:72) observed that the protection status of a species does not guarantee the survival of the species inside the protected areas; rather, it is driven by the preference of the hunters. Rowcliffe *et al.*, (2004:2634) found in a study conducted in Democratic Republic of Congo (DRC), aimed to determine if wildlife laws brought positive change in the protection of species, that species with greater protection were more likely to be hunted than the unprotected species (Rowcliffe *et al.*, 2004:2634). Rowcliffe *et al.*, (2004:2634) argue that the hunter's preference for protected species is because they are usually more profitable, thus increasing their likelihood of attack regardless of their protection status. This is a global trend and also true in the Republic of South Africa, where legally hunted species tend to survive better (Child, 2012).

The high protection status awarded wildlife may result in a number of controversial questions amongst local communities. Local communities are generally not involved in scientific data gathering; hence the status presented by scientists is not recognised in the communities; rather it is seen as another way of excluding communities from access to natural resources. In addition, the high investment in anti-poaching operations (about \$US 10,000 for helicopter surveillance rather than to people with no food) raises speculation that local communities are being deprived of the high economic benefits of charismatic species. Hence the exclusion of communities in scientific data gathering and increasing anti-poaching investment perpetuates the notion of exclusion.

Additionally, anti-poaching operations result in a number of economic opportunities – a few members of local communities who are employed as rangers. However, there is a whole industry driven by the rhino crisis that generates income for NGOs. Equipment, fundraising, engineers who have developed surveillance technology, technical equipment supply stores,

amongst others, stand a great chance to lose business should the poaching be reduced. This raises a few questions as to whose interests in anti-poaching are being served and what would be their role, or incorporation of their skills, in parks where there is no poaching. Therefore, ‘poaching’ can be seen as having benefits to a many people beyond local communities. Investment in anti-poaching operations needs to consider the above questions and their implications in the absence of poaching. Investing in community land use rights and ownership is more viable in the long term.

Massè and Lunstrum (2016:236) state that there is a growing concern about the devolution of state security to private companies because private companies are less concerned about the welfare of the community and are less accountable to the community than state security agencies. Massè and Lunstrum (2016:236) further argue that high securitisation of protected areas has great potential to backfire by further alienating the rural poor from access to natural resources for their livelihoods. As such, poaching pressure may increase as communities resist exclusion of access rather than obtaining support from other adjacent communities.

The above findings concurred with the study of Gibson and Marks (1995:941) in Zambia which shows that stringent conservation policies, prohibition of firearms, issuing of hunting quotas and paramilitary action failed to reduce the surge of poaching. The study argued that the conservation policies excluded local communities from legal access and right to utilise wildlife although other incentives were created. The increased focus on military enforcement and bureaucracy, rather than proprietorship of wildlife, further alienated communities in Zambia (Gibson and Marks, 1995:942). It is further argued that such policies are making two critical assumptions; (1) that rangers are willing to enforce wildlife laws and (2) the rangers are increasing the cost of hunting, thus reducing the benefits accrued from hunting (Gibson and Marks, 1995:942). However, the decline in living standards of rural communities adjacent to protected areas disproved the abovementioned assumptions as wildlife remained highly valuable especially during drought seasons (Gibson and Marks, 1995:943).

Marijnen and Verweijen (2016:275) suggest that there are a number of ways which have been used to justify the use of military force in conservation such as popular social media depicting armed rangers as ‘heroes,’ or as marketing strategies to raise funds for military practices including the use of militaristic language such as ‘combatting’, ‘war’ etc. The framing of the poaching challenge, for example, as a national security issue rationalises the

deployment of national security personal (Marijnen and Verweijen, 2016:275). Accordingly, the narrative to ‘save nature’ is generally justified as being ‘normal’, ‘rational’ and ‘legitimate’ reactions to the destruction of nature.

Media headlines are unintentionally exacerbating the conflict between local communities and protected areas. Media headlines portraying rangers as heroes for killing poachers ‘confirm’ assumptions that human life is less valuable than animals, with few stories that depict the dead poachers as someone’s children, or even people seeking to save their families from hunger. This reinstates the position of traditional conservation practice. Moreover, high prosecution sentencing also has mixed messages for communities living with crimes that people experience every day. The handing down of an eight year sentence to a poacher compared to five years for human murder, like the Oscar Pistorius case, is regarded by poor communities as an injustice to humans. While law enforcement is a valuable component to addressing poaching and illegal wildlife trade, there is a need for approaches that will support community safety and also incorporate other mechanisms for dealing with wildlife crime that focus on inclusion and rehabilitation rather than exclusion and shaming.

Duffy (2016:239) states that framing the poaching threats to wildlife as ‘war’ in an attempt to save them, legitimises the use of military force to protect wildlife which is a widespread practice in southern Africa. The drastic shift of aggressive force to conservation is linked to the drastic increase in poaching of elephants and rhinos as a consequence of the growth of the middle class in Asia (Duffy, 2016:239).

With regards to militarisation of protected areas, Büscher and Ramutsindela (2015:3) argue that this approach denies those who have been labelled poachers a right to life. Büscher and Ramutsindela (2015:3) are concerned that killing ‘poachers’ is legitimised for the sake of conservation, irrespective of the violent history within the Southern African Development Community (SADC). Cooney *et al.*, (2016:368) advocate for the need of non-lethal approaches to address illegal wildlife trade at community level focusing on community empowerment, engagement and benefit sharing as viable incentives to reduce motivation for illegal activity.

Duffy’s (2016) perspective omits the fact the rangers in protected areas are unable to compete with poachers who are heavily armed. Duffy’s argument is also said to lack evidence that

there is advancement in surveillance technology as opposed to military force. Additionally, poaching is also recognised as a crime of theft from state, private concession holder or local community. Tackling drivers of poaching through education and social development is useful, however, but by the time they bear fruit, there would be no wildlife left, hence the role of rangers is still evident.

Community-based natural resource management became a prominent rural development approach in the 1980s to involve rural communities in development issues by conserving natural resources on which they depend (Sebele, 2010:137). This became a favourable alternative to the traditional exclusionary ‘fences and fines’ approach (Holmes, 2003:305). CBNRM in Southern Africa has been focused around wildlife as a strategy to protect threatened wildlife from human encroachment and illegal harvesting (Barnes *et al.*, 2002:667). CBNRM assumes that communities will sustainably utilise and protect natural resources from which they benefit, provided the cost exceed the cost of living with wildlife (Mbaiwa and Stronza, 2011:1950).

CBNRM has great potential in sub-Saharan Africa. However, state reluctance to devolve power is the biggest hindrance to the maximum potential of CBNRM. In some cases, the challenge rests on the amount of decision-making power offered to communities in question. The assumption is that the benefit and outcomes of CBNRM, mainly from the value of wildlife, is too high for the state to release control (Nelson and Agrawal, 2008:558). Hence, devolution happens on paper but does not translate into action as central actors continue to retain control of wildlife outcomes with no accountability (Nelson and Agrawal, 2008:558). The lack of devolution has led to the assumption that CBNRM is failing.

Often literature portrays the local community as criminals and neglects to acknowledge that they are also affected by crime. According to Reiss (1986:1) communities can commit crime and can be victims of crime through direct or indirect involvement. Communities can indirectly be victims in a crime when their belongings are threatened or forcefully taken, such as property, or with an intention to defend belongings for personal interest, belonging to the community, government and organisation. Modern criminology studies attempt to understand the patterns and motivating factors associated with criminal behaviour and victimisation. Ultimately, the question is why some are affected by crime or criminal behaviour and not others. Some questions are about attempting to understand who is

responsible for intervening in such situations. In addition, who, when and where do people become victims of crime?

Liska and Chamlin (1984:386) suggest that economic vulnerability linked to economic inequality occurs where there is a huge income gap between the rich and the poor, the greater the gap, the higher the occurrence of criminal behaviour. In such a situation, the rich are more likely to adopt coercion strategies to bring about stability and social order. Additionally, they are better able to improve their security measures to protect themselves. Moreover, Liska and Chamlin (1984:388) caution that crime evaluations must consider crime as an individual act and not that of a collective.

Braithwaite's (1989) theory of reintegrative shaming states that the type of response to crime by a community is determined by its social formation. Reintegrative shaming theory argues that there is a way of presenting the unacceptability of crime without stigmatising people. The theory suggests that there is a constructive way of communicating wrongdoing to the perpetrator such that it encourages the individual to abstain from the crime. Stigma tends to perpetuate the wrong action by the perpetrator. In practice reintegrative shaming is done through positive and respectful communication, making the offender feel like a good human being but has done something wrong. Conversely, stigma is unwilling to forgive wrong doing and leave permanent scars on the perpetrator. According to Braithwaite (1989:1) "...societies that are forgiving and respectful while taking crime seriously have low crime rates such as Japan; societies that degrade and humiliate criminals have higher crime rates, such as contemporary western societies."

Communitarian societies adopted re-integrative shaming because the functions of the society are built on social norms, social dependence and the offender's continued participation in society. However, this system is broken down by criminal syndicates who undermine local leadership and intimidate community members and become more powerful where state law enforcement is absent, under-capacitated or where they neglect responsibility. This is common in many traditional societies in Africa and Latin America (Chalim and Cochran, 1997:205). On the contrary, *individualistic societies* are mainly dependent on exclusionary naming-and-shaming and fragment information mechanisms that enable and facilitate re-integrative shaming to maintain control. As such, individualistic societies are dependent on

coercive power (including military force) that exclude and produce recurrent stigma isolating offenders and exacerbating criminal behaviour (Chalim and Cochran, 1997:205).

One could argue that income related poverty also creates similar criminal patterns in individualistic societies where the ‘end’ justifies the ‘means’. For the disadvantaged, life threatening situations call for desperate measures to an extent that members of threatened households seek means to supplement their livelihoods as survival strategy. Equally arguable is that it is within human instinct to consider survival before other ramifications. However, Chalim and Cochran (1997:206) counter argue that providing economic means alone is insufficient to redress ethical anomalies in societies that disregard self-worth. Ideally, a successful community is built on recognising an equal standing for economic gain and impressing ethical values from an altruistic perspective.

2.6 CONCLUSION

In conclusion, poverty is a complex issue which can only be defined contextually. Scholars suggest that poverty definitions must include economic, social and cultural dimensions. However, income related poverty is valuable as it determines the power structures of a society. There is also a debate that the establishment of protected areas have contributed to the impoverishment and disempowerment of local communities by undermining governance, land use rights, resource use rights, and developing regulations that do not consider the right of the local people. Hence people poach as a protest against the protected area. Although protected areas have ecological and economic benefits for local communities, the costs of living with wildlife are still high relative to subsistence livelihoods. The seasonal employment also motivates people to participate in bush meat hunting which also has unintended consequences on high value species such as elephants. There is also an observed mix of subsistence hunters who are involved in poaching for trade in local markets to generate income. Multifaceted approaches are being developed to address illegal wildlife trade, and the military option remains prominent. Scholars have argued that decentralising law enforcements from state to private companies makes it difficult to regulate the level of force used. There is also a growing justification which the use of military force has and the ‘war on poaching’ amongst others, yet some scholars argues that this violates human rights. Community-based approaches such as CBNRM, can address illegal wildlife trade, but, the

slow and reluctant devolution of power, and benefits and resource use rights by the state hinder the potential benefits of wildlife to local communities. Criminology scholars also suggest that conservationists need to be aware of community structures and traditional approaches for addressing crime and the effects of green militarisation and criminality on the fabric of local society. Altruistic approaches work well in rural communities where traditional authority is strong and recognised. This approach allows poachers to be reintegrated as useful members of society.

CHAPTER 3

STUDY AREA AND METHODOLOGY

3.1 INTRODUCTION

This chapter presents the approach that was utilised to collect data from the Mangalane community in Mozambique. The study utilised both quantitative and qualitative approaches, adopting the approach of measuring people's perceptions, but also having them explained by the respondents. The case study approach is suitable to collect empirical data through inductive learning. Due to the sensitivity of the study, participants were randomly selected and all respondents were voluntary and anonymous. The study excluded individuals under the age of 16 years. This chapter also contextualises the Mangalane community. The area is a transit route of wildlife products sourced from South Africa and the study seeks to understand motivations for involvement or non-involvement in illegal wildlife trade.

3.2 STUDY AREA

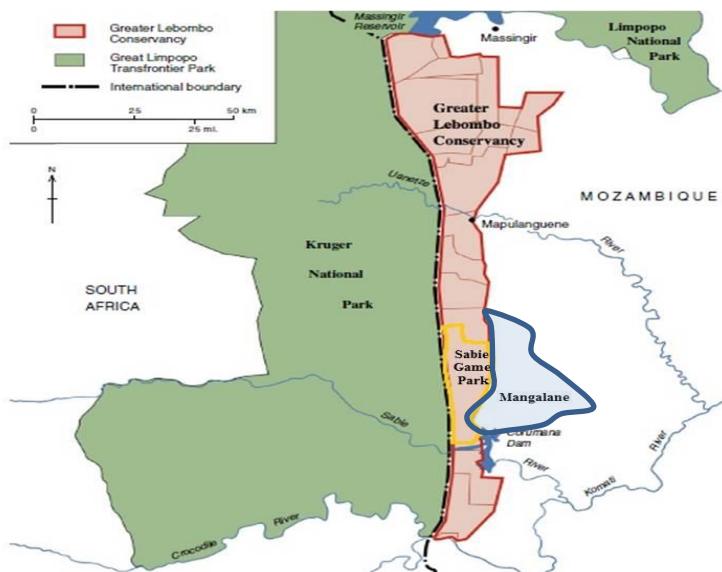


Figure 1: Map of Sabie Game Park and Mangalane community

Source: Massè and Lustrum (2016:228)

3.3 HISTORY

Mozambique gained independence from the Portuguese colonialist government in 1975 which was followed by a civil war in 1977 that lasted until 1992. The South African and Rhodesian apartheid governments aimed to destabilize the newly independent government by fuelling the 1977 civil war (Silva, 2007:113). The rebels destroyed social service infrastructures such as schools, hospitals and roads *inter alia*. Citizens who were suspected of supporting the new government were terrorised and displaced, and these included rural people.

The war had huge negative impacts on the country's economy and productivity due to destruction of agricultural production infrastructure, economic infrastructure and the gathering of international debts. According to Rotshuizen and Smith (2013:506) approximately 50% of Mozambique's rural community was displaced around the country or into neighbouring states during the civil war. Displaced people lived off the land causing substantial damage to the habitat and wildlife. These people have since settled in areas with a low natural resource base and alternative livelihood resources are sought in wildlife. Due to complex land tenure systems in Mozambique, rural communities do not have ownership of land or wildlife. However, traditional authority is recognised as formal and legal custodians of land in rural areas.

Rotshuizen and Smith (2013) assert that the war in Mozambique resulted in the neglect of protection of wildlife. At the same time, wildlife poaching and illegal trade presented an opportunity for the Mozambique Liberation Front (FRELIMO) and the Mozambican National Resistance (RENAMO) armies with ungoverned revenue opportunities. This challenge continued after the war, where in 2009 84 rhinos were killed in South Africa and this compelled the country to increase armed forces along the border between the Kruger National Park and Mozambique (Humphreys and Smith, 2011:137).

The country held its first democratic election in 1994 giving power to the FRELIMO coalition.

3.4 ECONOMY

The country's social and economic disparities vary geographically with east being the wealthy and west and north being excluded and neglected from the country's development. In the 1990s, Mozambique experienced sound economic growth. However, the benefits were not equally distributed amongst the citizens and poverty remains severe, particularly in the northern and western parts of the country. The Gini coefficient in the year 2000 continued to increase. Urban areas such as those in the capital Maputo experience higher economic disparities than their rural counterparts. In addition, the adoption of foreign white farmers from adjacent states to plough and cultivate fertile lands increased inequality and racial tensions (Silva, 2007:117).

3.5 EDUCATION

Like many African states, education in Mozambique during colonialism was done through Catholic missionaries (Cross, 1987:550). Unlike missionary education in other states such as South Africa, education in Mozambique remained an apparatus of the state and inferior education was offered to the blacks, resulting in challenges for the country to transform once independence had come (Cross, 1987:550).

From the 1960s the new government attempted to reduce colonial movements in the country and ultimately remove colonial strategies. Education became available to native Africans as it became mandatory for all children between the ages of 6 and 12 years with one national curriculum for all race groups (Cross, 1987:567). However, the focus was mainly on the attainment of primary education and subsequent neglect of secondary education for Africans was the result as many provinces remained without secondary schools (Cross, 1987:568).

In 2016 it was estimated that about 50% of adult population (15+ years) are illiterate, less than 5% have completed secondary school education (Porter *et al.*, 2017:23). While enrolment is about 88%, only 37% completed primary education. About 32% of females who enrolled in primary education complete, while 34% of males complete (Porter *et al.*, 2017:24). While primary education is free in Mozambique, inability to complete can be attributed to malnutrition, gender issues such as marriage of young girls, gender roles and

lack of transport infrastructure. In many rural communities, women have limited access to education opportunities (Chimbutane and Benson, 2012).

3.6 FOOD SECURITY IN RURAL MOZAMBIQUE

More than 68% of households living below the poverty line are found in rural areas. Of the population in rural areas 54% live in extreme poverty (Bilale, 2007:10). Subsistence agriculture is the main livelihood option, but the majority of the land is infertile, hence the majority of households are food insecure and there are limited alternative opportunities. Although rural women are the major contributors to food in the household, they have limited control over production resources and trade.

In Mozambique, rural households are said to be food insecure if they are unable to attain their daily calorie requirement (Mabiso *et al.*, 2014:652). Food insecurity in rural Mozambique increased from 43% in 2002 to 48% in 2008 (Mabiso *et al.*, 2014:650). The increase in food insecurity can be attributed to the food price crisis in 2008 hindering progress in poverty reduction with huge impact in rural communities in the southern part of Mozambique. Food security continues to be a development challenge in Mozambique negatively affecting 68% of population. Additionally, 70% of rural residents are mainly dependent on subsistence farming threatened by climate change.

The civil war in Mozambique was the largest contributor to food insecurity in rural Mozambique. In the last decade, destruction of infrastructure due to floods and droughts has exacerbated food insecurity thereby worsening Mozambique's dependence on international food aid. Vulnerable rural households continue to seek infrastructural development for agriculture such as irrigation systems. Due to political tensions in rural Mozambique, former RENAMO supporters are not priorities in economic development plans (Mabiso *et al.*, 2014:652).

Access to safe drinking water and recurrent droughts are some of the factors that impact urbanisation patterns in Mozambique. Approximately 65% of rural inhabitants in the Maputo province do not have access to safe drinking water while 89% do not have access to appropriate sanitation facilities. Maputo had not yet achieved its target of providing 70% of

rural dwellers with improved drinking water by 2015. About 50% of the population do not have access to safe drinking water and adequate sanitation and only 6% of rural dwellers have access to safe drinking water and sanitation (Carrilho *et al.*, 2015:27). Lack of access to water remains a challenge in Mozambique as periodic drought is highly demanding on the region's irrigation and agricultural infrastructure (Carrilho *et al.*, 2015).

3.7 MANGALANE VILLAGE

The Mangalane community is located on the southwest border of Mozambique, adjacent to Sabie Game Park (SGP) (a private hunting reserve, which borders on South Africa's Kruger National Park (KNP) for a distance of 40km and covers some 28 000 hectares of land). The SGP is located between two water sources for the community: Mazintonto River in the north and Corumana Dam in the south. In 2000, the SGP received a 99 year lease and on the basis of a hunting permit granted nine years later, generates wildlife revenue. McDonald Safaris operates as the hunting outfit in the Park.

Like many other rural communities in Africa, some of the villages of the Mangalane community were resettled from their land to establish the SGP. The community adjacent to the park occupies approximately 50 000 hectares of land. It is composed of five villages namely, Constine, Baptine, Ndindiza, Mukakaza and Mavunguana. The community is sparsely populated with about 480 households, or about 1800 individuals. Adults above the age of 40 years in the Mangalane community have no formal primary education due to the political instabilities mentioned above.

The livelihoods in the community depend on subsistence agriculture, mainly livestock and maize. Food insecurity is a common threat to the survival of households, exacerbated by periodic drought seasons and occasional tropical cyclone events. Limited access to safe drinking water affects crop productivity, livestock and human health. About 21% of households survive through employment in South Africa and remittance while 47 people are employed in the SGP. In addition, the Mangalane community receives 20% of wildlife revenue from the SGP through hunting fees paid to the Mozambique government in accordance with the Mozambiquan Conservation Area Laws.

To facilitate good relationship building and reconciliation, the SGP approached the South African Wildlife College (SAWC) in 2013 to initiate a community-based natural resource management (CBNRM) project to support household livelihoods and the development of community infrastructure. At the time, there was poor community governance – community members had negative attitudes towards wildlife and people were not involved in the decision-making processes regarding the benefits received by the community. Additionally, community members did not see opportunities in wildlife contributing to their future development or co-existing with livestock. The project was expanded in 2015 by the World Wide Fund for Nature South Africa (WWF SA) through funding support from the United Kingdom (UK) government’s Illegal Wildlife Trade Challenge Fund (IWT CF) to address three key areas 1) to support economic development and livelihoods 2) community governance and 3) increase of law enforcement capacity and legislative awareness.

3.8 METHODOLOGY

3.8.1 Sampling

The surveys were conducted over a period of five days in four of five villages of the Mangalane community (Mavunguana, Constine, Ndindiza and Mukakaza). The fifth village, Baptine was excluded for safety reasons due to the ongoing intimidation of the community by criminal syndicates. Participants were randomly requested to voluntarily participate in the survey at the end of a monthly village meeting. A total 119 of 480 household heads participated in the survey representing 25% of the total households of the Mangalane community.

Baptine village did not participate in the study due to socio-political instability amongst community members, threats and intimidation by criminal syndicates. The enumerator was made aware of the sensitivity of issues in the village which the study may unintentionally exacerbate. In addition, heads of householders being persons under the age of 16 years were not allowed to participate in the study as they are regarded as minors according to Mozambican law. The enumerator was cognisant of some of the senilities of the statements made in this study. However, it would be worthwhile investigating the survival strategies of child headed households in rural areas that are negatively impacted by illegal wildlife trade.

3.8.2 Participatory data analysis

The survey was first translated into Xhitsonga, which is the local language also spoken by the Tsonga/Shangaan, consisting of 50 statements grouped according to the different hypothesis under the different themes as factors influencing involvement in illegal wildlife trade. All participants were assigned a list of statements and they were required to state whether they agree or strongly disagree with the statement.

The data were collected in two phases on the same day at each village. The participants were required to complete the quantitative survey then later shuffle and distribute the completed forms amongst themselves to assist with quantifying the data on a flip chart and then provide qualitative responses to the findings. This was done to ensure that the information gathered was a true and accurate representation of the participants and that their reasons were captured to represent their real life experience. This method also serves to empower people to analyse data and to own the information they provide.

For phase 1, the rules of the survey were explained to the participants, including the fact that they need not answer questions that they were not comfortable with and that they could stop participating without reason. To account for the low literacy amongst the participants, the survey was conducted in a form of structured interviews. The statements were read out aloud to participants and they were allowed to ask questions for clarity. The respondents were required to respond by placing a dot with a marking pen next to the figure that resonated with their perception. The choice of responses were ranked from strongly agree to strongly disagree depicted by the facial expressions (see annexure 2 below) to account for the low literacy levels amongst participants;

Table 1: Respondents option to statement

strongly agree	Agree	neutral	disagree	strongly disagree
😊😊	😊	😐	😢	😢😢

Phase 2, was conducted as a participatory data analysis approach where each participant was assigned a completed form. Using a systematic flow, the participants were requested to raise their hands to capture the corresponding response. Each response was captured as an asterisk above the corresponding response to produce a charm as represented below. The respondents were then asked to provide possible reasons to explain the pattern of the chart.

Table 2: Example of participatory data analysis with respondents

X				
X				
X				
X				
X				X
X	X		X	X
X	X		X	X
X	X	X	X	X
😊😊	😊	😐	😢	😢😢

3.9 LIMITATIONS

The approach is time consuming as the enumerator spent about 30 minutes explaining the approach and assisting participants to overcome the fear of holding a pen. This was followed by another 2 hours and 30 minutes to complete the process in each village. However, the participants were enthusiastic about the participatory research and expressed feelings of empowerment having contributed meaningfully to scientific research. There were time limitations due to bad weather as the survey was conducted under a tree because there is no community hall to host participants.

The methodology adopted to capture responses based on people's perceptions can be useful when developing site based projects to address context specific issues. Perception studies are usually descriptive of social, political and cultural actors. As such, depending on the level of tension on the ground, some areas may be excluded from studies. Perception studies are subjective study may be limited in generalisability of findings. Furthermore, perception studies are often regarded as competing with or intended to discredit local authority.

Random sampling may exclude critical respondents which may have been identified if research is conducted through purposive or snowball sampling. Additionally, the study was conducted in a focus group setting of all selected individuals. In such setting, power and gender dynamics are often present and often difficult to negotiate.

3.10 CONCLUSION

Mozambique is a relatively poor country compared to some of its African counterparts. The series of wars in Mozambique have negatively impacted the economy in the country with the most severe impact experienced by the rural poor. The limited service delivery in rural Mozambique has resulted in the majority of the poor being food insecure and this is worsened by unpredictable weather patterns. The Mangalane community is a prime example of the socio-economic challenges experienced by most rural Mozambique communities, including issues such as lack of employment, education and safe drinking water.

The Mangalane community has been working with Sabie Game Park and other NGOs to improve the socio-economic needs in the community to address illegal wildlife trade. While the project shows positive progress, the limited state support has the potential to negatively impact progress made.

CHAPTER 4

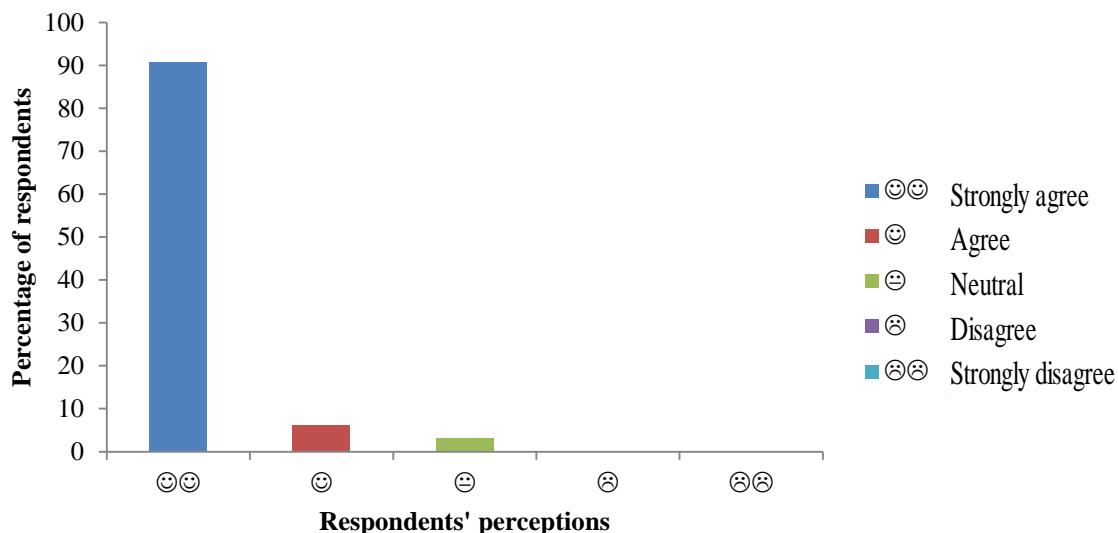
FINDINGS AND ANALYSIS

4.1 INTRODUCTION

This chapter provides an analysis of the findings to understand the community's perception of socio-economic factors that motivate and demotivate involvement in illegal wildlife trade. The questions explored require understanding of community relationships with Sabie Game Park, community perception of conservation policies, park rangers and how they perceive poaching and poachers. A summary of the findings is later provided in an attempt to outline the factors that influence human behaviour and interpretation of events in their community.

4.2 POOR PEOPLE POACH

Figure 2 below shows that approximately 91% of the respondents strongly agree that they hunt bush meat to feed their families, 7% agree, 3 % are neutral while no respondent disagrees with this statement. This supports literature that subsistence hunting is common practice amongst poor communities residing adjacent to parks (Biggs *et al.*, 2016). However, the community argued that the establishment of Sabie Game Park redefined natural resources and how wildlife is utilised. Householders who participate in subsistence hunting, mainly antelopes, are denied access. The respondents suggested that the fence represents the extent of wildlife ownership; accordingly, wildlife outside the fence should be owned by the community or returned to the park. On the contrary, some members of the community argued that wildlife was almost depleted because of the civil war. Wildlife numbers have increased because of Sabie Game Park, but most of the wildlife is a threat to community livelihoods – for instance, disease from buffaloes affecting livestock and animals, such as lions and elephants, causing damage.



Quantitatively, figure 3 depicts that 66% of the respondents strongly agree that people engage in bush meat hunting activities when they run out of food. Approximately 13% also agree, 13% remained neutral, 3% disagreed and only 6% strongly disagreed. During the feedback session, the respondents suggested that hunting for food is a common practice. However, not all the meat is consumed by the household as they do not have storage facilities. Some of the meat is sold to neighbouring communities and towns such as Magude and Maputo. Some hunt birds such as vultures which are sold in South Africa on the *muthi* (traditional medicine) market. Some women argued that their male children are recruited to participate in rhino hunting where most of them are killed. The young men hunt rhinos to make more money because they aspire to become wealthy like their recruiters. In addition, they hunt rhinos to make more money to pay *lobola* (bride price), and be allocated land with his new family. In recent years, the involvement in hunting has declined as Sabie Game Park has established a food distribution programme to support household protein needs, while other households substitute income with remittances and tuck shops, and livestock sales. But the respondents also suggested that they would like to be granted permission to hunt inside Sabie Game Park. The community also received income of 20% of what Sabie Game Park paid for hunting licences to the Mozambique government. However, the 20% revenue is insufficient once shared amongst the households.

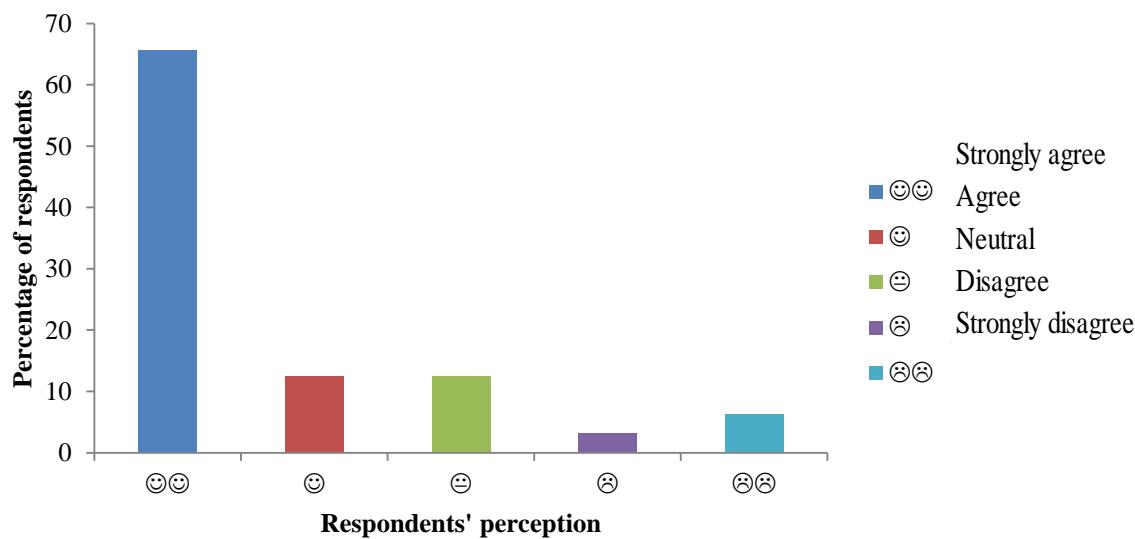
Figure 2: Poor people hunt for bush meat to feed their families**Figure 3: Illustrates whether people only hunt bush meat when they run out of food**

Figure 4 illustrates that 47% strongly agree, 3% agreed, 34% are neutral and 16% strongly disagree. During the feedback session, the respondents argued that lack of money is not the only factor motivating engagement in hunting as mentioned above as some households have stronger livelihood bases that are not dependent on income. In addition, hunting is dependent on the purpose of the hunting, either to earn more income through selling or hunting for household needs. Additionally, some households engage in hunting regardless of the amount of money available to them hence the purpose for hunting is best described at household level rather than community level.

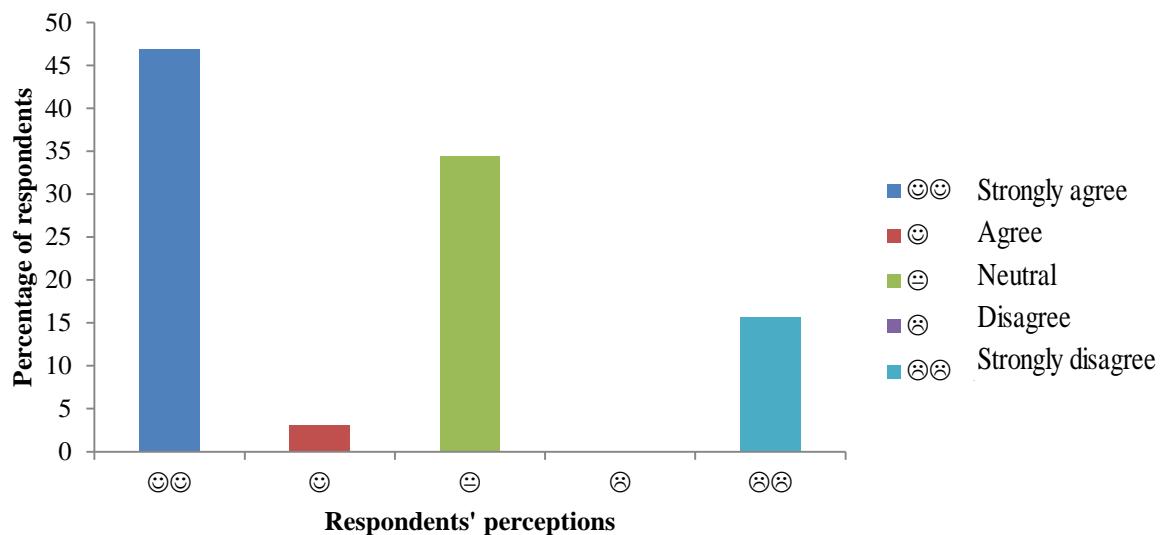


Figure 4: Illustrates whether people hunt for bush meat when food runs out

Figure 5 shows that 63% strongly agreed, about 16% agreed, 13% are neutral, 3% disagreed and 6% strongly disagreed. During the feedback session, the respondents suggested that even though household survival strategies vary, most of them are dependent on access to water, or a well-functioning ecosystem. As such, the drought destroyed livestock and crops which are very important assets to the community. Hunting during the drought period was mainly for household consumption but it was very high risk since the park is worried about rhino poachers. In addition, there was no standard agreement to either allow the community to hunt, or to provide more water for the community to continue with their own agricultural practice. In addition, due to political reasons the Mozambique government is no longer providing food aid to the community. Moreover, the women in the community are involved in charcoal trade to increase income. However, even this activity is becoming more demanding as the buyers in Maputo are offering less and less money for each charcoal bag. Consequently households need to harvest more trees which are causing a decline in the desired plant species. The respondents argued that even if people had access to income, there is low service delivery and travelling to their nearest town is an onerous task.

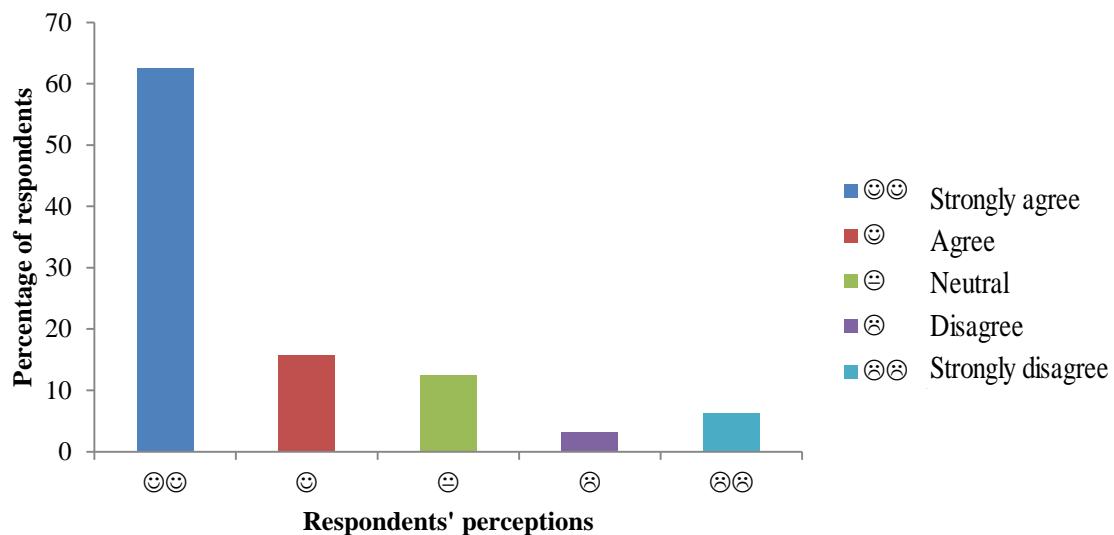


Figure 5: Sows whether people hunted bush meat more during the recent drought

According to figure 6 below shows that an estimated 31% strongly agree, 9% agreed, 34% are neutral, 3% disagreed and 22% strongly disagreed. Figure 6 does not clearly illustrate whether people with less or more money are more involved in hunting. During the community feedback session, the respondents suggested that hunting practice is dependent on the purpose for hunting. Poor households hunt more meat when household food supply is threatened. On the contrary, commercial rhino hunters hunt throughout the year. These hunters are better resourced with equipment to navigate the terrain and avoid being caught by park rangers. However, commercial hunters are not from the community, although they ask for information from the community. The respondents suggested that those who are informants for outsiders are all putting the whole community at a safety risk, considering that they just came out of a war. The respondents believe that developing trust is important to the community, because commercial rhino hunters negatively affect relationships with the park, and with neighbouring communities. This is because Mangalane community became primary suspects after poaching incidences and leaders from neighbouring communities are addressing poachers from their own ranks.

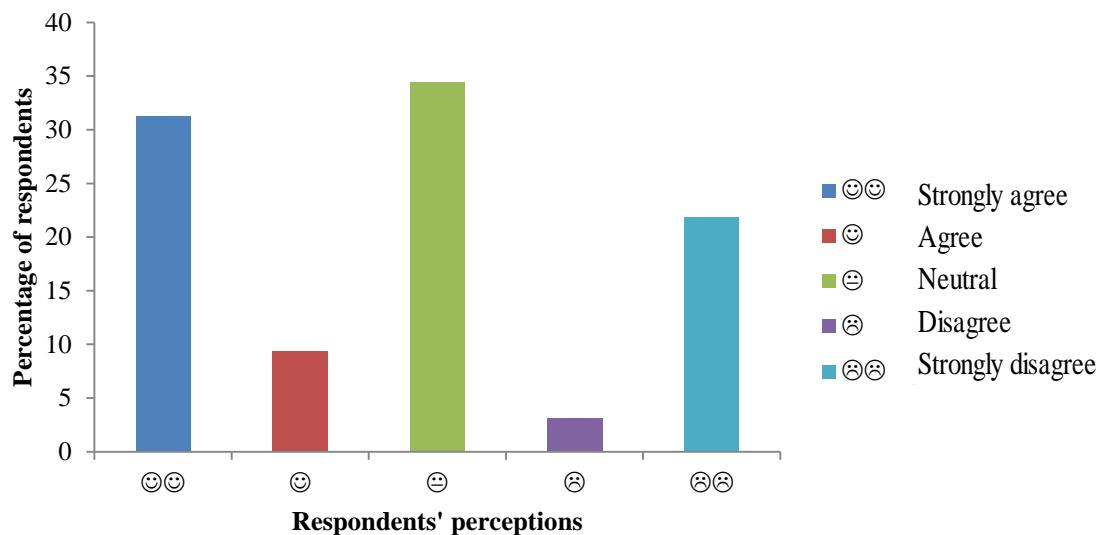


Figure 6: Shows whether people with less money who are involved in hunting

Figure 7 below shows that about 63% strongly agree that people hunt rhinos to make more money, 9% agree, 16% are neutral and 13% strongly disagree. In the feedback session, the respondents stated that poachers are not from the Mangalane community, although they request information from people in the community. The respondents are aware that some of the people in the community are being paid to supply information to the park and poachers. During droughts, it is more beneficial to provide information to poachers than to participate in subsistence hunting. The rhino has no direct use for the community; the respondents stated that rhinos do not provide many benefits to the community. Rhinos benefit a few households who supply accommodation, food and those that retain income from poaching syndicates. Nonetheless, in reference to the high cost of helicopters, aeroplanes, vehicles and staff to protect rhinos which costs about \$76 000 per month, the community is curious as to why, Sabie Game Park is willing to invest so much money in security to protect rhinos, rather than developing the community, especially during a drought. On the other hand, rhino hunters are willing to risk their lives to gain possession of rhino horn. According to the respondents, the community is being deprived of the true value of the rhino horn.

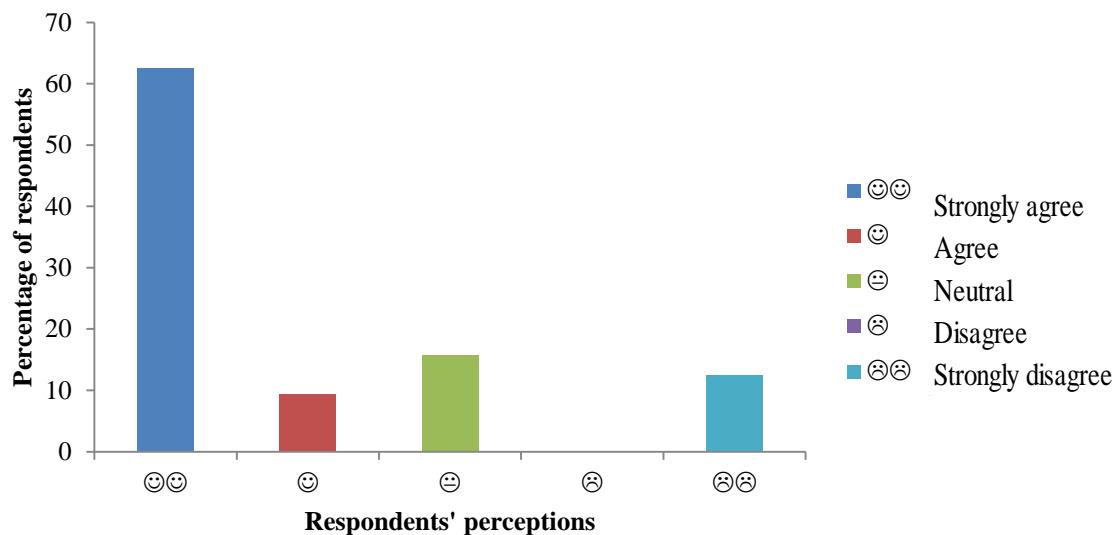


Figure 7: Shows whether people think people hunt rhinos to make more money

According to figure 8 below, about 63% strongly agree, 9% agree, 16% remained neutral, 3% disagree and 9% strongly disagreed. During the feedback session, respondents argued that people in the community are struggling to survive because there is no employment, families are becoming larger and weather is increasingly becoming unreliable. Although food aid is very useful, it takes away the dignity of men being providers for their families. Men wish to be afforded opportunities to earn their living and prove to their elders that they are valuable members of the community such as the Food for Work Programme initiated by WWF South Africa and Sabie Game Park. Young men are no longer visionaries because there are limited opportunities for them to progress in life. Women in South Africa are more successful than men in Mozambique. Hunger is a big challenge in the community and influences many decisions that people make in order to survive

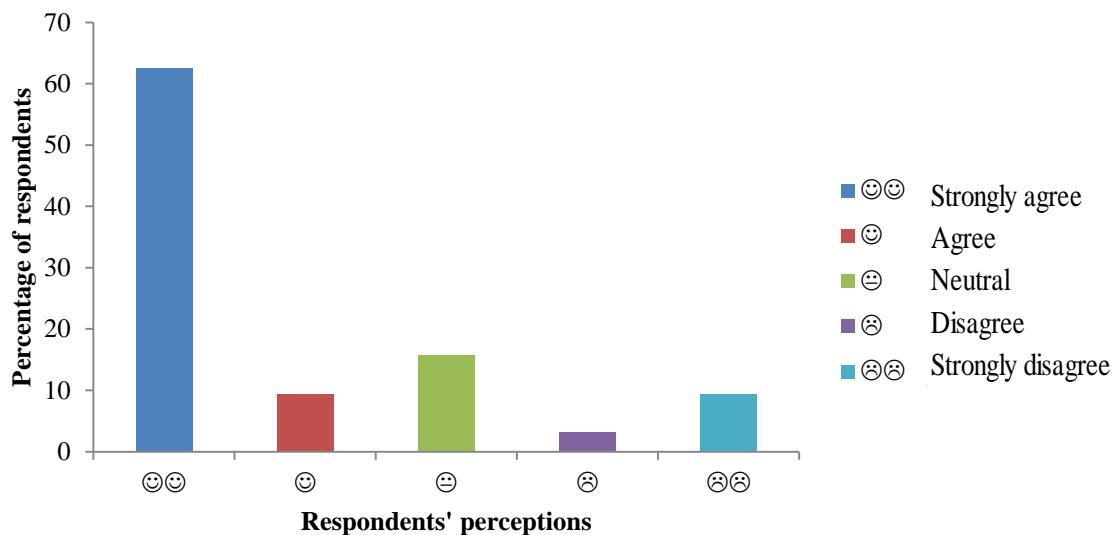


Figure 8: illustrates whether poor people poach bush meat when they are hungry

Figure 9 below shows that approximately 47% strongly agree, 16% agree, 6% are neutral and 31% strongly disagree. The community is divided as to who is responsible for stopping poaching as 63% agree and 31% strongly disagree. The respondents suggested that rhino poaching is a concern of Sabie Game Park and Kruger National Park since the animals are on their property. Since the park does not respond to wildlife problems on community land, similarly, when the rhinos are inside the park, they are the responsibility of the park. On the other hand, the community believes it needs to be involved in stopping poaching because this activity is linked to other lawless behaviour in the community such as alcoholism, human mutilation, cattle theft and increased fear. However, both the community and the park need to agree on how this will be done to help one another. At this stage, it seems the park needs information from the community, but the community is not adequately compensated for losses caused by animals, even though rhinos are not responsible.

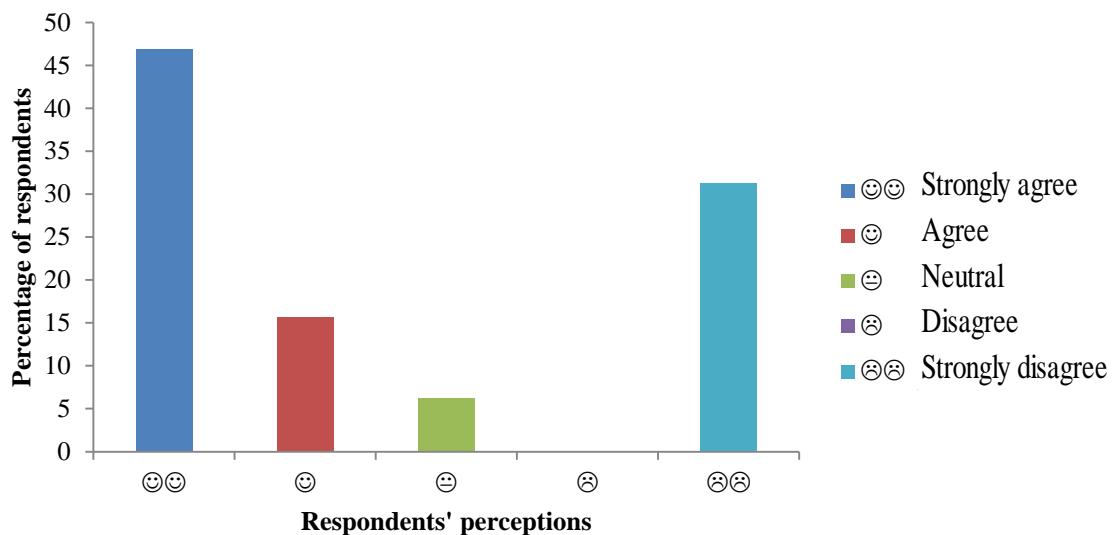


Figure 9: Shows whether people think it is the community's responsibility to stop poachers

Figure 10 illustrates that about 13% of the respondents strongly agree that rhino poaching is a good thing while 3% agree, 6% remained neutral, 6% disagree and 53% strongly disagree that poaching is a good thing. Although wildlife governance has changed with new ownership, poaching remains unacceptable especially because it is being done by outsiders. The respondents argued that the community is not benefiting from poaching, but they are bearing the costs of poachers navigating through their community. In addition, poachers are negatively influencing young men in the community to become involved in illegal activity. There is a growing perception that a man should die in a struggle fighting to support his family, hence being killed during a poaching incident is perceived as honourable. The respondents added that poaching is a crime defined by Sabie Game Park which is not equally shared by the community. The community is struggling with crimes such as cattle theft and human mutilation linked to rhino poaching, but Sabie Game Park is not willing to assist. Equally, the community is not willing to assist with rhino poaching crimes. The respondents called for the need to engage with Sabie Game Park about issues affecting both parties and not only matters that affect the park.

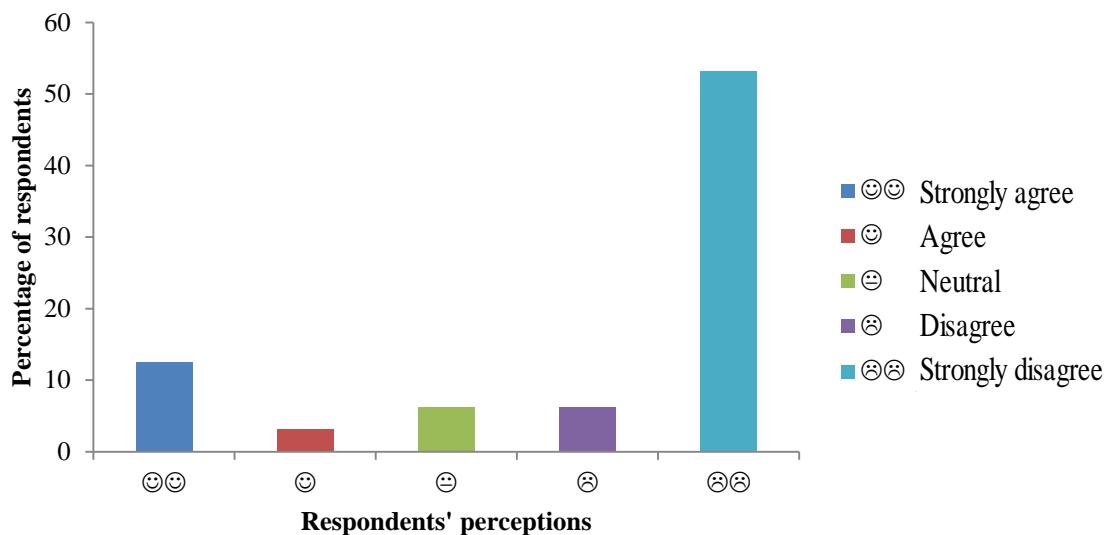


Figure 10: Illustrates whether people think poor people are of the opinion that poaching rhinos is a good thing

4.3 SUB-CONCLUSION

Income related poverty and vulnerable livelihoods are motivating factors for people to become involved in illegal wildlife trade related activities such as poaching, providing information, assisting with recruitment of poachers, to mention but a few. Poaching of rhinos is recognised by the community as unacceptable as it perpetuates other criminal activities such as cattle theft, human trafficking and body mutilation (knee caps for *muthi* trade) and lawlessness, such as alcoholism and prostitution. The community stated that the benefits from rhino poaching are not equally shared in the community, while the whole community has to bear the costs of crime and lawlessness. Rhino poaching is identified as negatively impacting on the relationship between Sabie Game Park and the Mangalane community, as well as other neighbouring communities where they suspect poachers come from. Irrespective of the high risk of rhino poaching, 'honourable death' perceptions have become associated with rhino poaching amongst young men with growing pressure to acquire status and provide for their families. In addition, the community feels excluded from the perceived economic benefits of rhino horn and other natural resource use rights. Fundamentally, the community calls for transparent engagement with Sabie Game Park to recognise that the community is also negatively affected by rhino poaching. Rhino poaching crimes affect the community before they impact rhinos in the park – both deserve equal recognition for their seriousness.

4.4 Poor people like poachers?

Figure 11 shows that approximately 28% of the respondents strongly agree that rhino poachers are good people, 6% agree, about 12% remained neutral, while 3% disagree and 50% strongly disagree. Fewer respondents perceive poachers as bad people (34%) compared to (53%). During the feedback session, the respondents argued that the community is not inclined to label people as criminals and in this case ‘poachers’. According to the respondents, a ‘poacher’ is a foreign term that is designed to keep local people from accessing resources that they once owned and hence the term ‘poacher’ is not recognised as soon the whole community will be labelled as a ‘poaching community’. Such negative labelling and shaming have negative impacts when attempting to reintegrate people into society. Negative labelling is isolating and perpetuates the formation of lawless gangs that disrupt social order. Moreover, the ‘poacher’ strips the individual of his identity as a useful member of society in the role of a husband, father, brother and friend and makes it seem justified for them to be killed because they are without identity. Fundamentally, ‘poachers’ are taking what rightfully belongs to the community which was stolen from them. The contradictory ‘poacher’ label is associated with poor people and there has been no labelling of people who stole land from communities to establish their conservation businesses. While scholars have commonly used the Robin Hood analogy to describe ‘poachers’, the Mangalane community analogy strongly relates to a 17th century English poem *Stealing the Common from the Goose* which refers to the injustice of fencing common land for private property (Walljasper, 2013).

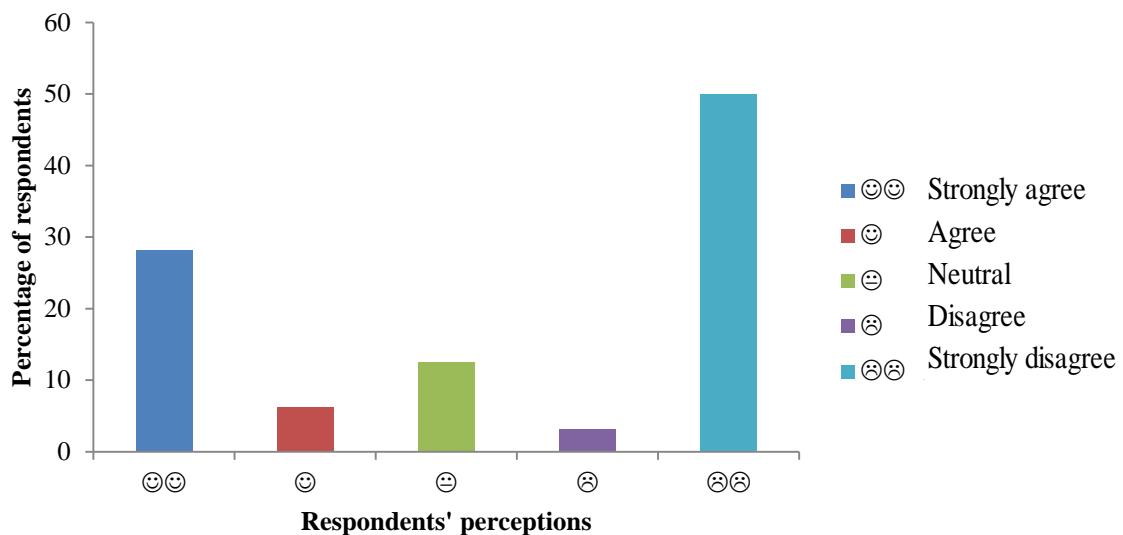


Figure 11: Shows whether people think rhino poachers are good people

Figure 12 below shows that 9% of the respondents strongly agree that poachers help them in the community, 6% agree, 21% are neutral, 3% disagree and 59% strongly disagree. Most of the respondents (62%) say that poachers are not helpful in the community, compared to 15% who agree. In the feedback session, the respondents emphasised that poachers are not from their community and hence not obligated to assist the community in anyway. Poachers also have access to income to establish local shops and *shebeens* creating small businesses. The poachers in the community are well resourced people with cars who assist with transport to hospitals, travelling to town to buy food or look for employment. Poachers also assist with short term loans to households who need financial assistance. Some of the respondents suggested that although they may be helpful to some people, they attract crime and lawlessness and hence their actions are unacceptable. The community's privacy is invaded by surveillance and subjected to occasional home invasions by park rangers looking for poachers and rhino horns. The costs of accepting assistance from poachers are too high compared to the benefits which are usually available at household level. Access to money and weapons gives the poacher's power over traditional authority and undermines local systems. Poachers will potentially undermine any form of development in the community that threatens their status quo and relieves the community from depending on them. The community is concerned that starting a wildlife business would result in poachers stealing from them as well.

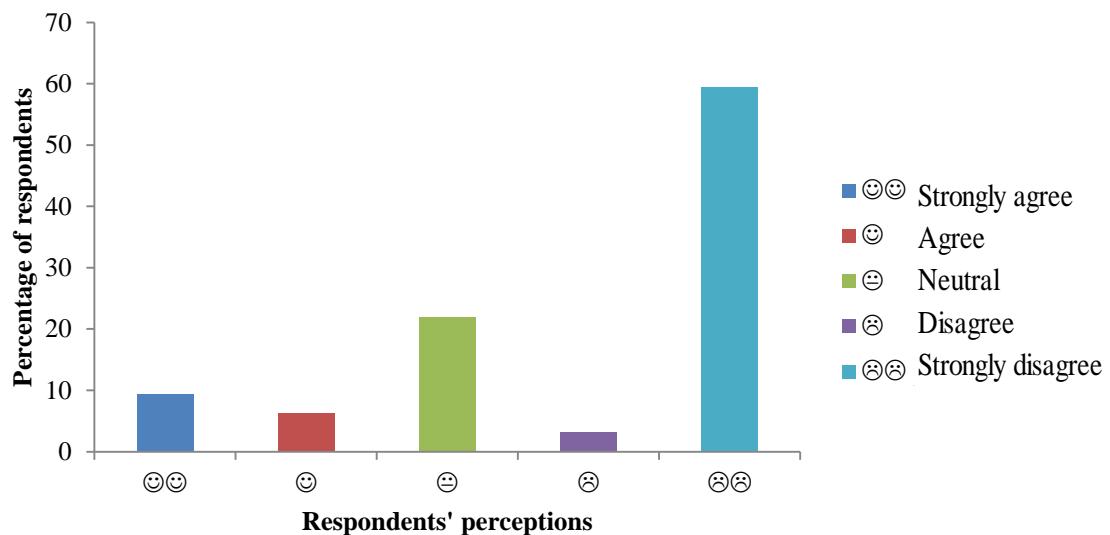


Figure 12: Shows whether rhino poachers help people in the community

Figure 13 depicts that about 22% strongly agreed, 6% agree, 9% are neutral, 3% disagree and 56% strongly disagreed. The majority (59%) say that income from poaching is not shared with the community compared to 28% who agree. During the feedback session, the respondents stated that poachers keep all the income with their families while the community experiences the high cost of living with poachers when subjected to security invasions. The acceptance of money from poachers perpetuates social division in the moral structure created by the civil war. Poachers target influential people with power to negotiate their acceptance in the community and instigate social division to create distractions from their deeds. Poachers instigate fear in the community due to their access to money and weapons, thus being able to capture leadership thereby exacerbating fear in a community that was traumatised by the civil war, resettlement and now poaching.

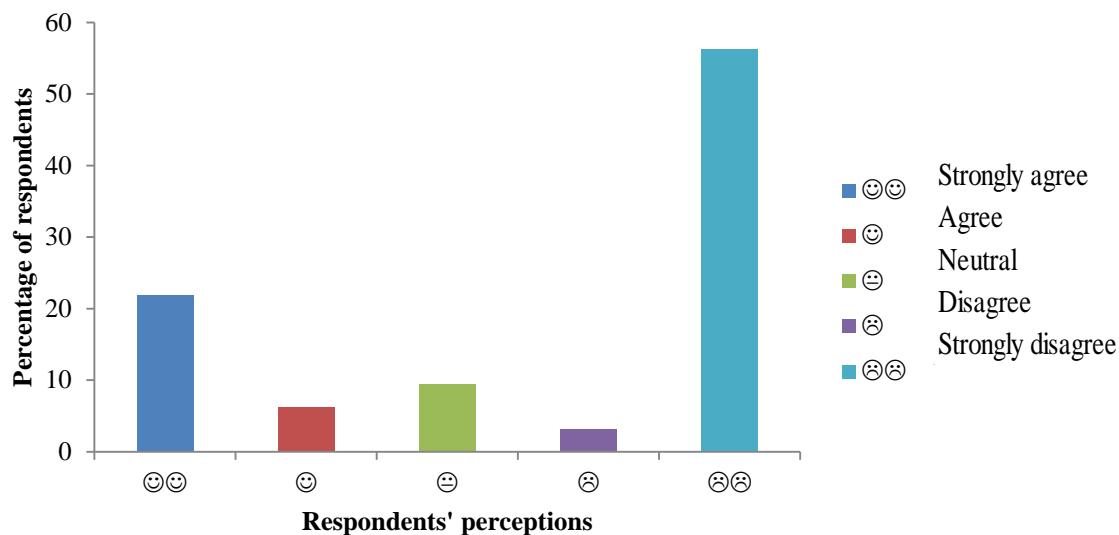


Figure 13: Illustrates whether poachers share their money with the community

According to figure 14, approximately 19% strongly agreed, 16% agree, 16% are neutral and 31% strongly disagree. There is no clear distinction whether the community believes poaching is good for their future or not. During the feedback sessions, the respondents argued that poaching is illegal to those who created fences around common goods. As a result, the community is struggling to survive because important water points have been enclosed inside Sabie Game Park. The community has more immediate needs such as access to water and to secure land tenureship. Without land security, the community cannot plan a future. Poaching is an activity that some people participate in to survive the present day. However, poaching does not support the whole community and is mainly done by people from neighbouring communities. The lack of governance nullifies the idea of the community having a future as everyone is trying to grab what they can while they can. Additionally, the risk of poaching is too high for those who are concerned about the future

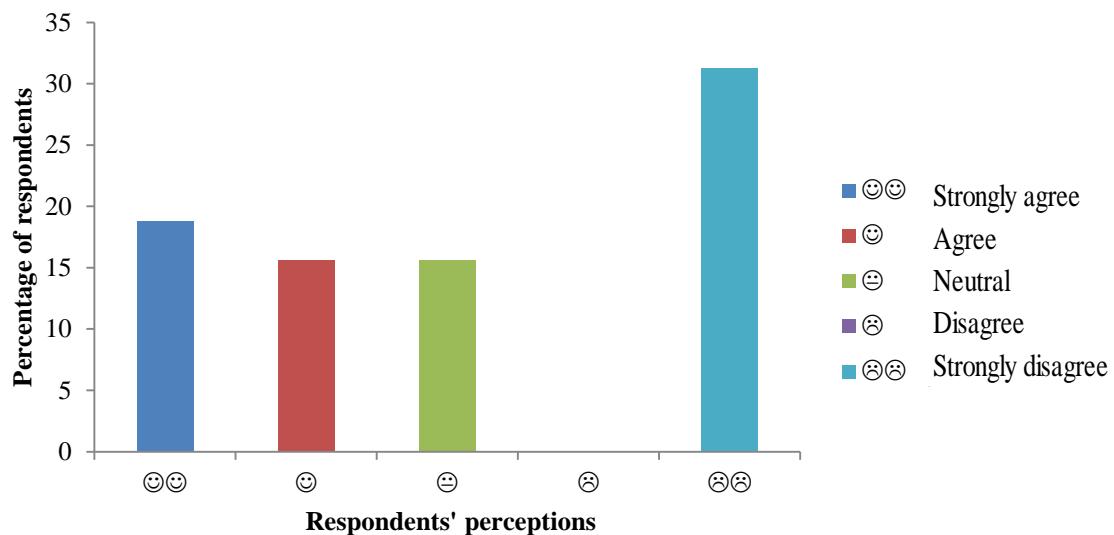


Figure 14: Shows people's perception whether poaching is good for the community's future

According to figure 15, about 22% strongly agree, 19% agree, 13% are neutral, 3% disagree and 44% strongly disagree. Respondents stated that poachers are usually skilled and influential people in the community and target young men from more desperate households. Poachers are thus a selective group with resources who make money for themselves. It makes sense because poachers are the only ones who risk being arrested or killed in the park. As a result, the gains cannot be shared with the community.

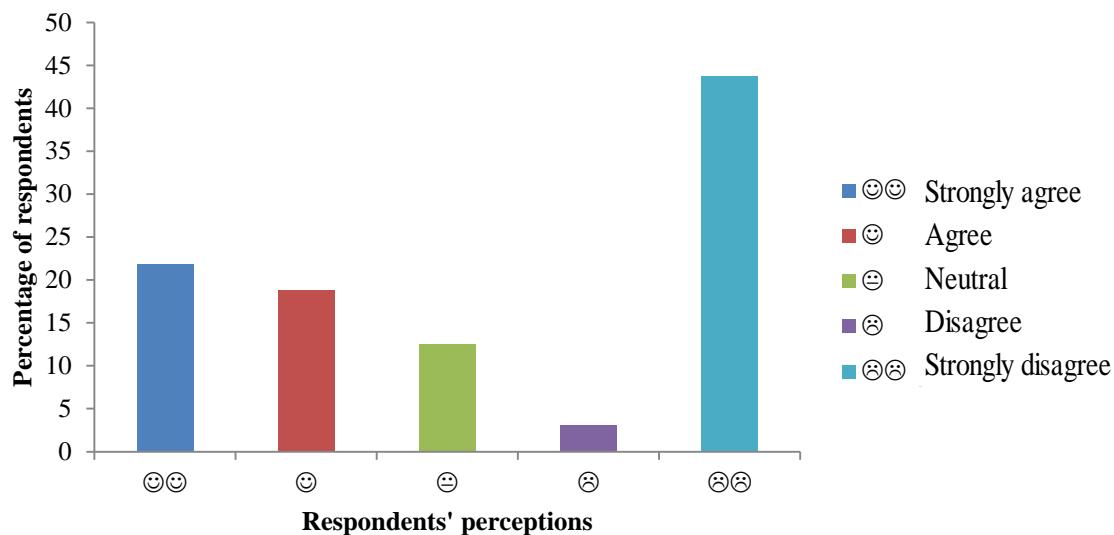


Figure 15: Illustrates whether poachers help the community with food

Figure 16 shows that about 19% strongly agree, 13% agree, 13% are neutral and 56% strongly disagree. During the feedback session, the respondents stated that poachers are useful to their own household and to their immediate family and friends. There is no agreement with community leadership to have a group of community poachers who will then have to share their time and resources with the community. Their roles are not recognised by traditional authority and neither can they make it explicit that they are poachers. Helping the sick is the role of traditional healers and nurses at the clinic. However, the poachers have assisted some people by transporting them to hospitals as the clinics could not assist. Poachers have access to vehicles and also provide financial loans to help transport people to obtain medical assistance in Moamba town located about two hours and thirty minutes' drive away from the village.

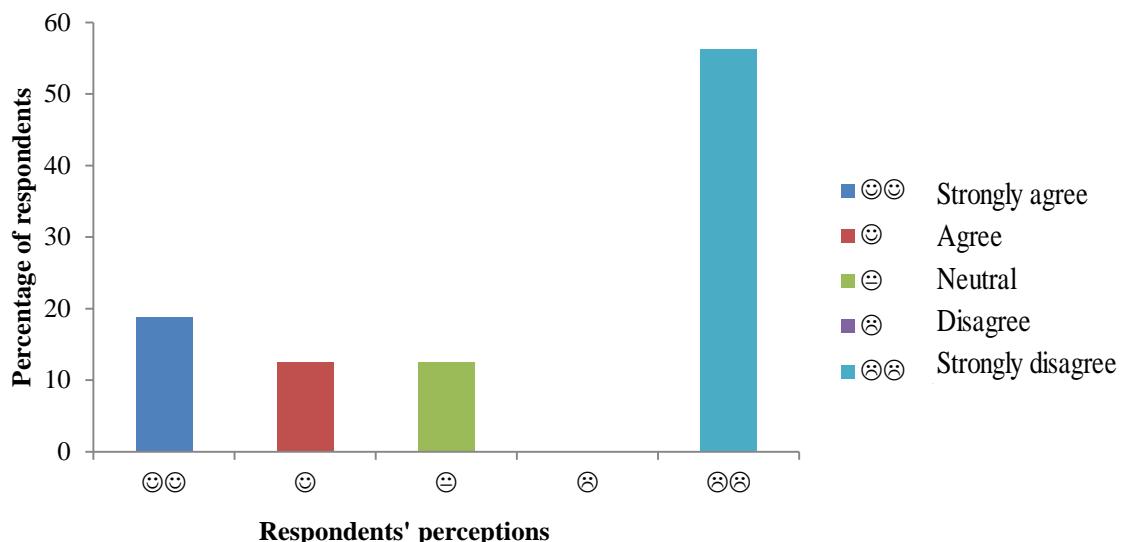


Figure 16 Shows whether poachers help the people in the community when they are ill

Figure 17 shows that about 25% strongly agree, 13% agree, 15% are neutral and 47% strongly disagree. The respondents at the feedback session stated that poachers are not bad people; they are usually young men who lack opportunities to utilise their capacity constructively. As young men, they are highly capable to do good for themselves and other people. The community does not recognise them as poachers, but as useful members of the society who need to be corrected. However, the criminal syndicates make it difficult for elders to rehabilitate the men who have been recruited. The term poacher carries a negative connotation and renders them invaluable and useless to the community. The labelling of people as poachers has further negative impacts as the individuals feel useless and unwanted. Instead of these young men coming back to the community and showing remorse, they opt to stay with criminal syndicates where they are provided with financial and social security.

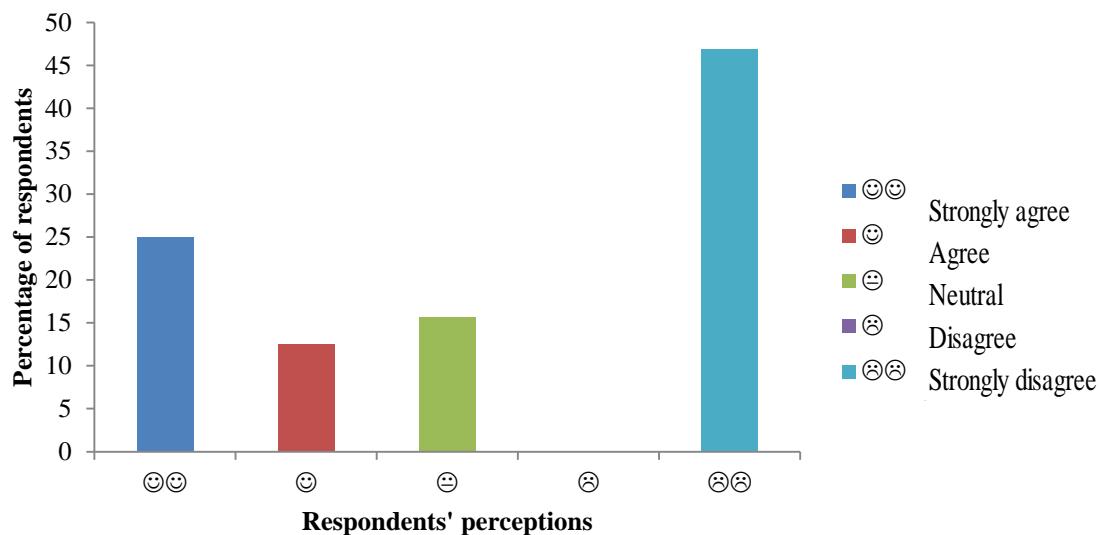


Figure 17: Illustrates whether poachers helpful around the community

According to figure 18, an estimated 47% strongly agree, 25% agree, 9% are neutral, 3% disagree and 16% strongly disagree. About 72% agree that people poach rhinos less than before compared to 19% that disagree. During the feedback session, the respondents stated that the reduction in rhino poaching is as a result of several reasons. Collectively, the community is receiving income and meat from wildlife that is equitably shared. This contributed to the community perceiving this as a first step towards allocating natural resource use rights to the community. The village police programme is also aimed at keeping young men busy and assisting them to obtain positive status in their community. Having 21 young men participating in the aforementioned programme means 21 young men who are not desperate to become involved in illegal activities.

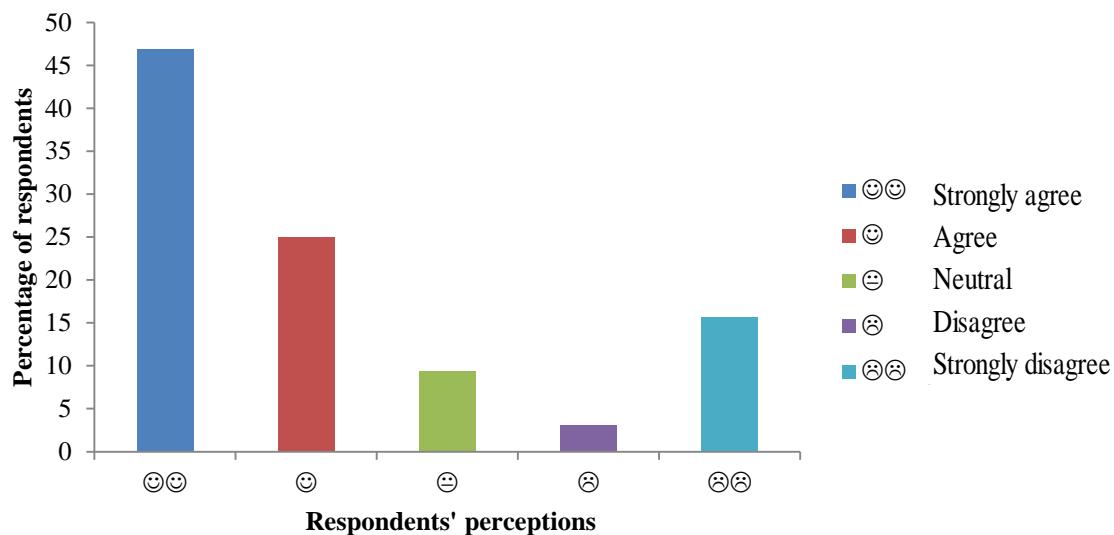


Figure 18: Shows whether people poach rhinos less than before

Figure 19 shows that about 19% strongly agree, 16% are neutral and 53% strongly disagree. During the feedback session, the respondents stated that rhino poaching benefits some people economically through exchange of money, business, transport, etc., – poaching does more bad than good. Rhino poaching attracts criminal syndicates to the community who are linked to human trafficking, human mutilation for *muthi* (which craft) to give them strength, cattle theft and lawlessness such as alcoholism and prostitution. Young men also idolise poachers as role models and aspire to acquire similar material goods through rhino poaching. However, there is growing speculation in the community that there is high value in rhino horn and that the community is being excluded from it. The respondents argued that there is high investment by game parks reserves to protect rhinos and criminal syndicates are willing to risk their lives to acquire the rhino horn. Additionally, the challenges in question are a result of the presence of rhinos. If they were removed, community safety may improve, but criminal syndicates might find another animal to poach.

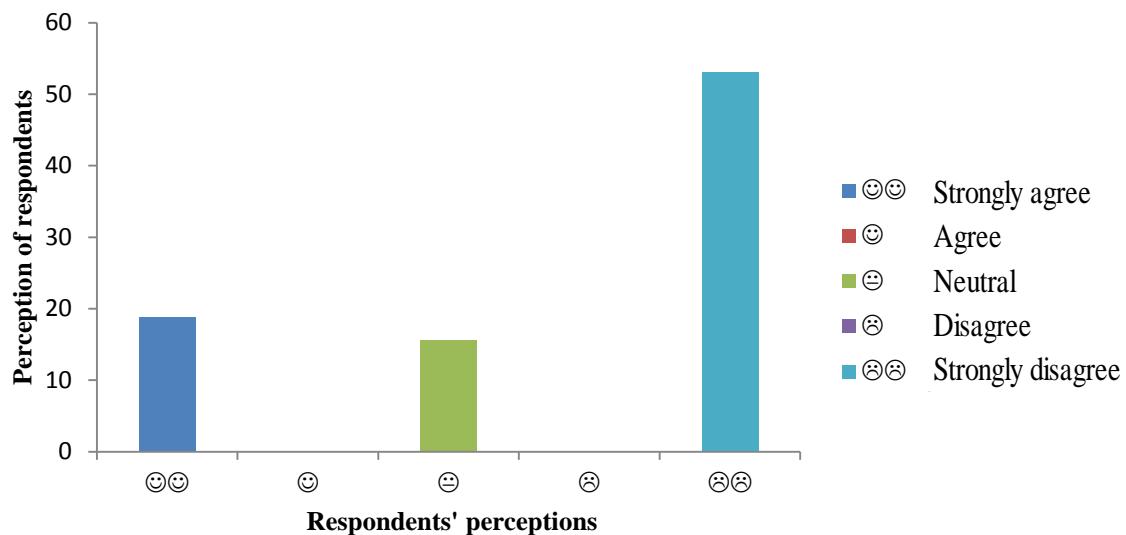


Figure 19: Shows whether people percieve rhino poaching as a good thing

4.5 SUB-CONCLUSION

The results above show that rhino poaching is unacceptable in the community. The community is concerned that rhino poaching attracts lawlessness and undermines community safety and security. While game reserves are often concerned with rhino carcasses, the community advocates for investigation on how rural communities such as Mangalane are negatively affected by the criminal syndicates. Additionally, criminal syndicates prey on young men who lack development opportunities and are enticed to acquire status and power in the community by means of their material wealth. Similarly, young women are attracted to more financially secure men who are usually poachers. While some argue that the resources inside the game park were once common goods and the term poaching is not recognised in the community, poaching is a form of theft and is unacceptable in the community. Fundamentally, there are issues related to land use and natural resource ownership that need to be addressed. To some degree, certain members of the community are passive recipients of poaching benefits as a livelihood strategy.

4.6 FINDINGS AND ANALYSIS: POOR PEOPLE DETEST WILDLIFE

Figure 20 shows below that approximately 72% strongly agree, 13% agree and 16% strongly disagree. About 85% of the respondents agree that they like wildlife compared to 16% who do not. During the feedback session, the respondents stated that they have lived with wildlife for many generations. However, during the civil war, hunting became a common practice in the community as people were no longer able to farm drops or cattle. Due to lack of hunting governance, wildlife became difficult to find and they started hunting on a larger scale close to the fence of the Kruger National Park. However, not all animals were hunted as traditional laws only permitted hunting of species that people were able to consume. The few who do not like the wildlife in the park argued that the risks of living with wildlife are high as predators kill their livestock and also people, buffalos bring disease and elephants destroy their homes. There is no compensation for damage and deaths caused by wildlife that is now owned by Sabie Game Park. As the legal owner and hunter, Sabie Game Park must take responsibility in order to improve community attitudes towards wildlife.

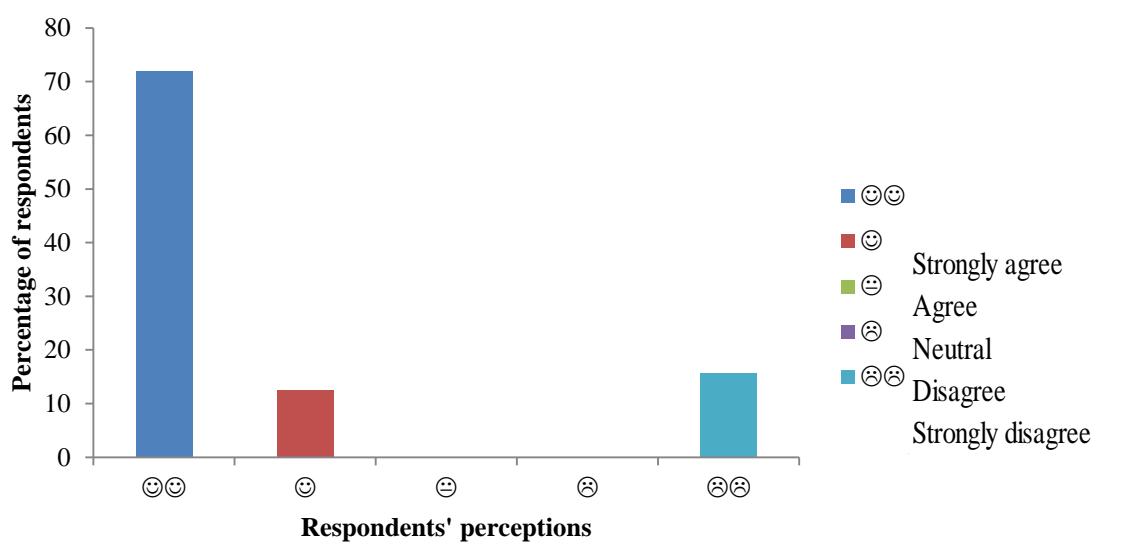


Figure 20: Shows whether people like the animals inside Sabie Game Park

Figure 21 illustrates that 31% strongly agree, 3% agree, 38% are neutral and 25% strongly disagree. The responses are not clear as 34% suggested that some animals must be removed, 38% were neutral and 28% disagree. Those who agree argued that human/wildlife conflict is a big problem for the community. The park is very slow to respond to the need of removing

surplus buffalos that are escaping from the park into the community; these results in the spreading of disease which kills cattle and destroys crops. There are a number of problem animals including elephants, cheetah and lions that devour livestock and destroy crops. There are also rhinos that attract criminal syndicates. Those who strongly disagree suggest that there is a lot of money to be made from wildlife. However, at the moment, little money comes to the community and that at a very slow rate. Once there are more stable benefits from wildlife and costs are reduced by Sabie Game Park fixing their fence, then people would be more willing to live with wildlife. Moreover, the community must also have rights to hunt wildlife and not only wait for handouts from Sabie Game Park.

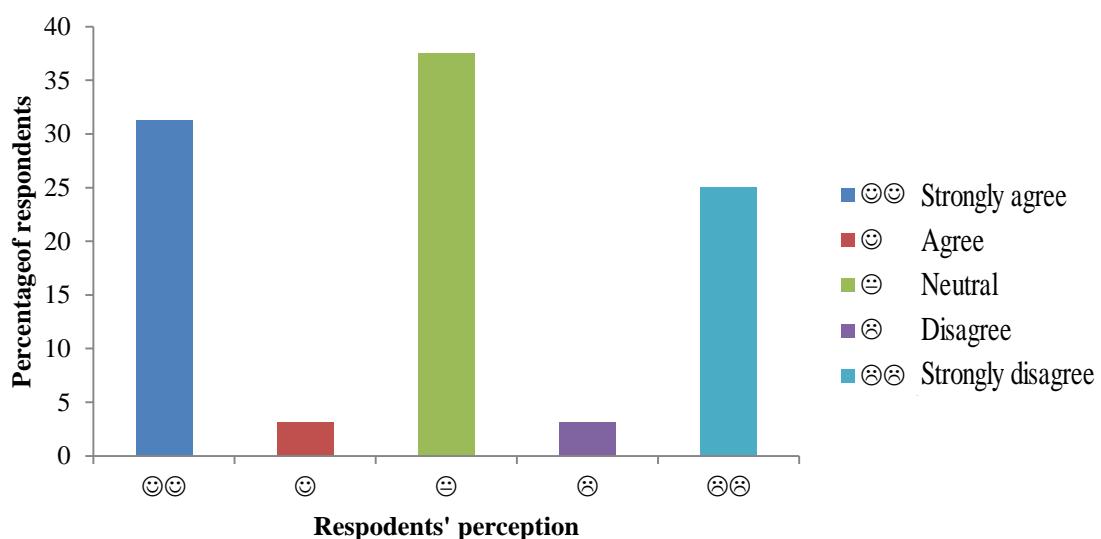


Figure 21: Shows whether people think some animals must be removed from Sabie Game Park

Figure 22 shows that about 72% strongly agree, 9% agree, 16% are neutral and 9% strongly disagree. Figure 23 shows that the respondents strongly agree that they like wildlife as long as they remain behind the fence. The respondents advocate for human/wildlife conflict to be reduced as wildlife is threatening their livelihoods. The compensation for losses is not determined by the community who would have been the deciders of how much they would be willing to sell their livestock for. The community is suffering from a double loss; the animal is no longer able to produce and cannot be sold at a fair and desirable price. In addition, one cannot put a price on human life that has been lost as a result of wildlife. Sabie Game Park must improve the quality of their fences and reduce the number of animals they have.

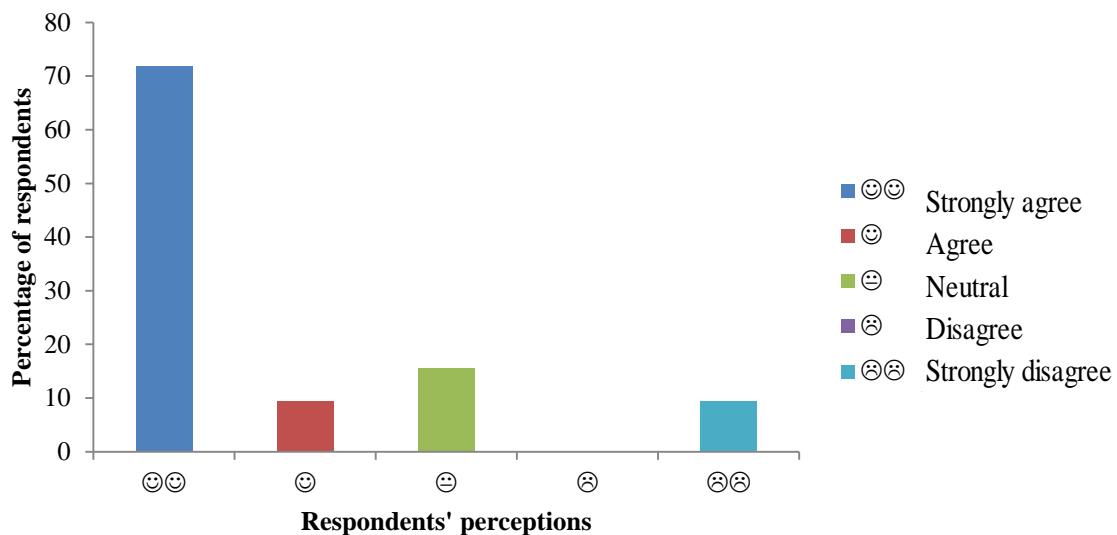


Figure 22: Illustrates whether people like the wildlife as long as they stay behind the fence

According to figure 23 below, about 78% of the respondents strongly agree, 3% are neutral and 3% strongly disagree. According to the respondents, there is a compensation received for losses and damage caused by wildlife, but there is no clear system that the community and the Sabie Game Park have agreed on. As such, the community is compensated according to what the Sabie Game Park thinks is suitable which the respondents argue is not always fair. Thus it would be best to co-develop a compensation plan that will work for the community and Sabie Game Park. The respondents further questioned how human life would be compensated for and how to add value to a human life. The main hindrance to develop a compensation scheme is the fact that the owner of Sabie Game Park is not willing to meet with the community and undermines the community's governance system.

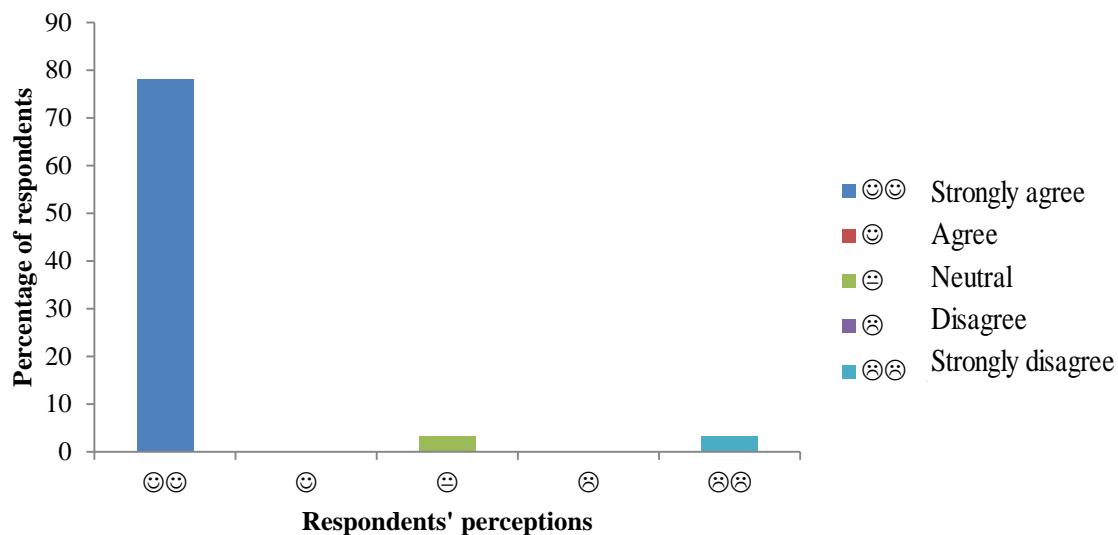


Figure 23: Dipsicts whether people like wildlife if they are compensated for loss and damage caused

Figure 24 shows that about 78% strongly agree, 9% agree and 1% strongly disagrees. During the feedback session, the respondents expressed the opinion that they would like to find ways to generate income from wildlife. However, they are not strongly convinced that wildlife economy is suitable for them because human/wildlife conflict is a problem. Moreover, the current income from wildlife that the community receives is not enough to support their basic livelihoods unless there is a clear plan of how human/wildlife conflict will be managed based on a participatory agreement between Sabie Game Park's owner and the community.

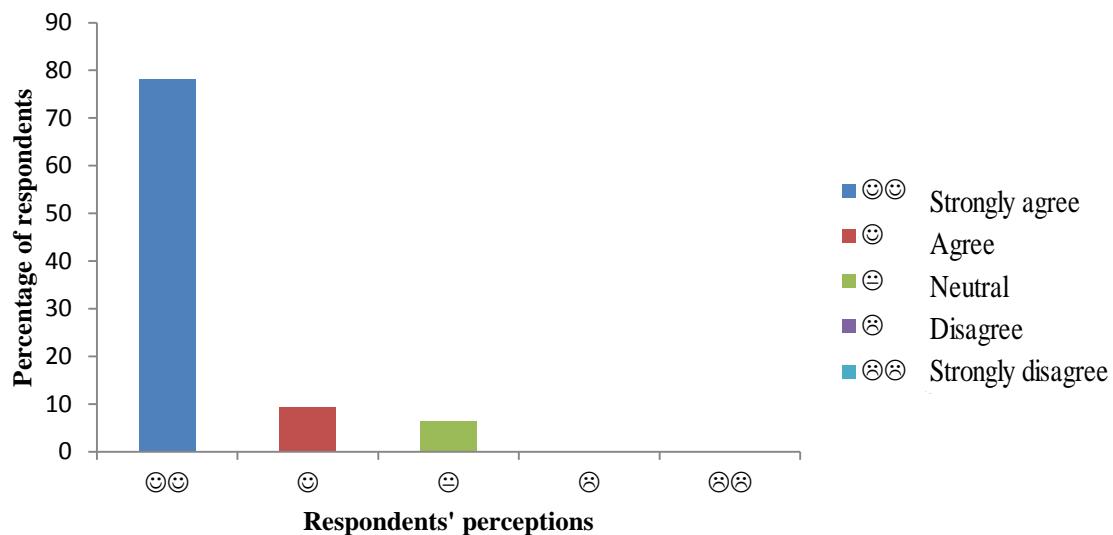


Figure 24: Shows whether people like wildlife more if they could make money

According to figure 25 below, approximately 31% strongly agree, 13% agree, 19% are neutral and 19% strongly disagree. About 44% of the respondents stated that they would like to own wildlife in the same way they own cattle. This means that they get to decide how many they can sell and the amount of profit made. However, they are more interested in plain game such as antelopes. The respondents who disagreed to having more wildlife argued that that would require high investment for matters such as fencing, rangers and disease management. Moreover, each household would not be able to farm its own wildlife and there exists a potential for conflict with regards to how the money would be shared

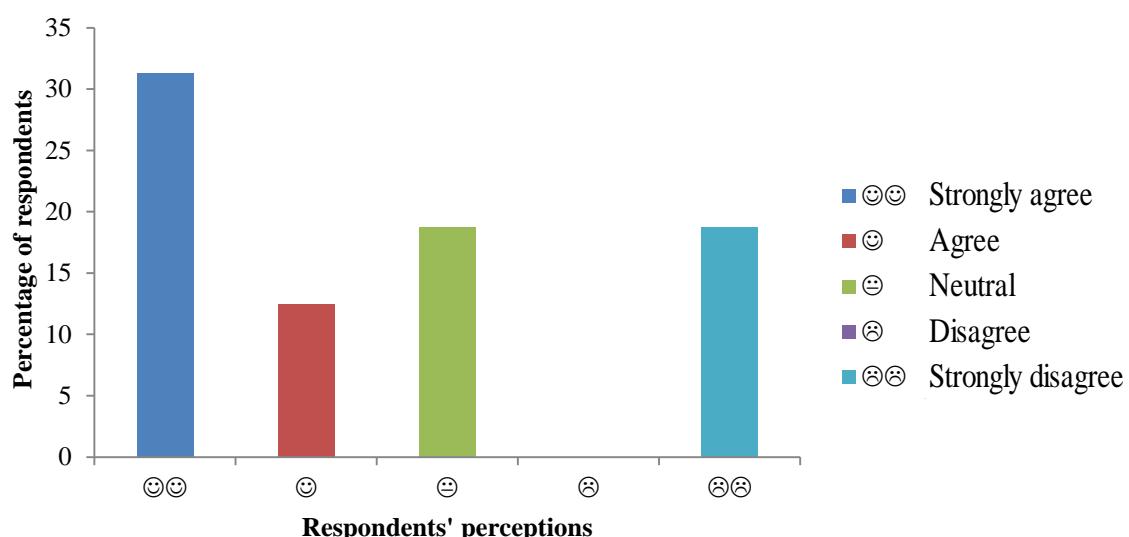


Figure 25: Illustrated whether people would like wildlife more if you could own them like cattle

According to figure 26 below, about 25% strongly agree, 9% agree, 28% are neutral, 3% agree and 34% strongly disagree. It is not absolutely clear whether the community sells the meat they hunt. During the feedback session, the respondents stated that people hunt only what they can consume because they are unable to store meat for a long period. Hence, some people sell some of their meat to purchase non-perishable goods such as maize meal and legumes. Although meat is very important to the community, it is mainly consumed during ceremonial gatherings such as weddings, funerals and other traditional celebrations. The meat is sold to other people in the Mangalane village, as well as to neighbouring villages. Selling meat in town is not easy because of the distance involved and the community does not have access to regular and reliable public transport

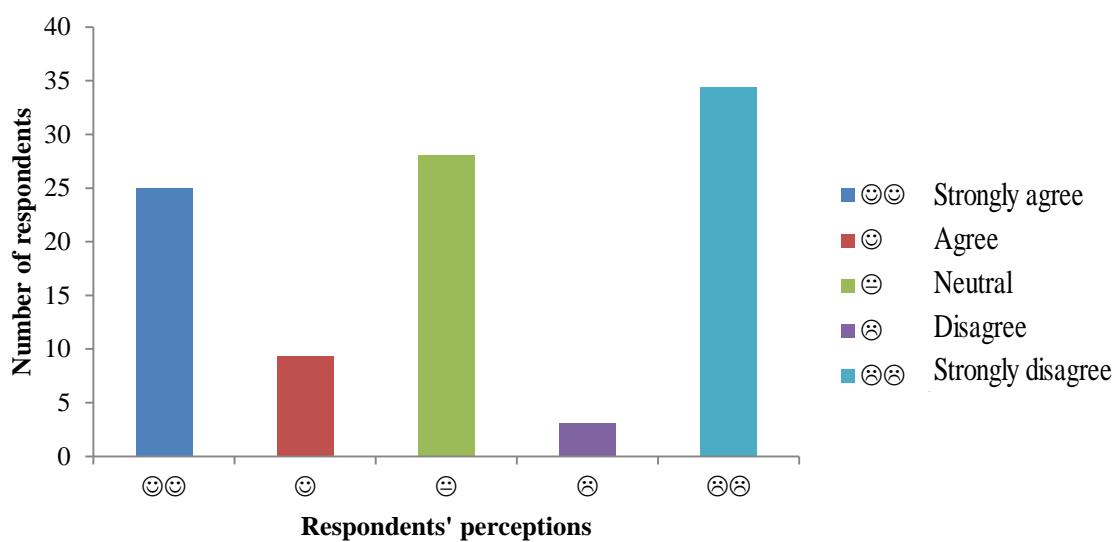


Figure 26: Shows whether people in the community sell the meat they hunt

Figure 27 below demonstrates that about 28% strongly agree, 13% agree, 34% are neutral and 35% strongly disagree. About 41% of the respondents agree that the benefits received from wildlife exceed the cost. However, 35% strongly disagree while 35% say it is not clear. The respondents argue that the benefits in the form of money are being received by all registered members of the community, but the costs are not equally shared by all members. The benefits are currently insufficient to meet household needs, and livelihood losses are far worse. No clear compensation strategy regarding losses has been agreed to with Sabie Game Park. A price cannot be placed on human lives lost in the community. Additionally, Sabie Game

Park's wildlife business must not negatively affect the community's subsistence farming. If the park wishes the community to protect wildlife, then it must ensure that the community members and their assets are protected.

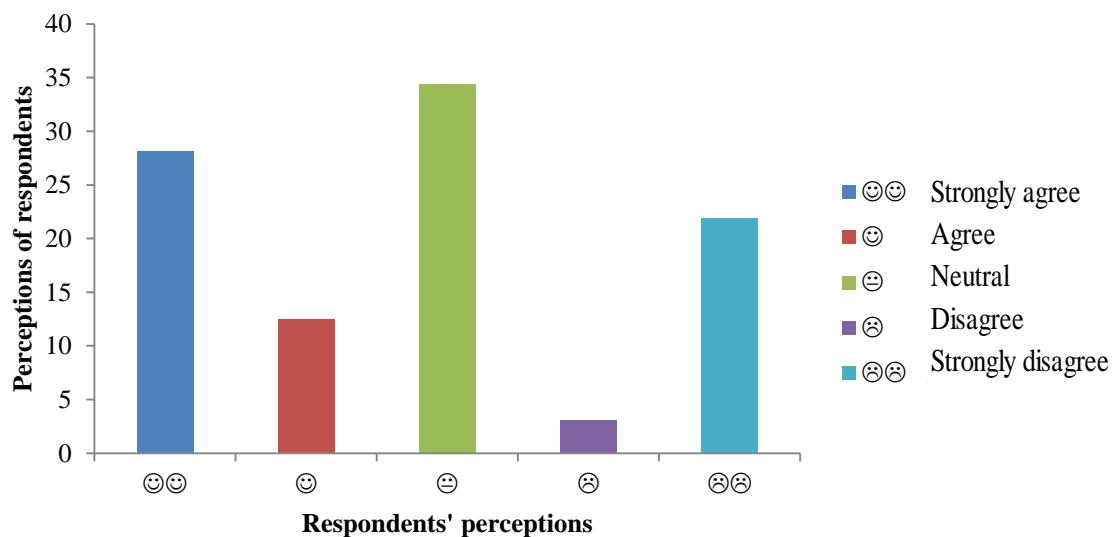


Figure 27: Illustrates whether the benefits received from wildlife are more than the costs

According to figure 28, about 28% strongly agree, 19% agree, 25% are neutral and 28% strongly disagree. There is no clear decision on whether the community should allocate space to start a wildlife farm. About 47% agree while 28% strongly disagree. At the feedback session, the respondents stated that they would like to make more money from wildlife, but they are concerned that rural people are constantly being moved around to make way for new development. Government and the private sector are failing to keep their promise after resettlement and these results in unwanted conflict. Moreover, development is never done with the view to uplift the local communities. Similarly, huge pipes are being laid from Corumane dam to direct water to Maputo without supplying piped water for communities living closer to the dam. The community fears that it will lose its land to wildlife and other developments. Additionally, the respondents argued that game reserves are modern forms of colonialism where local communities are restricted with regard to the use of resources and to where they are allowed or not allowed to go. Establishing a community game farm would result in the perpetuation of modern colonialism under the pseudonym of conservation and economic development.

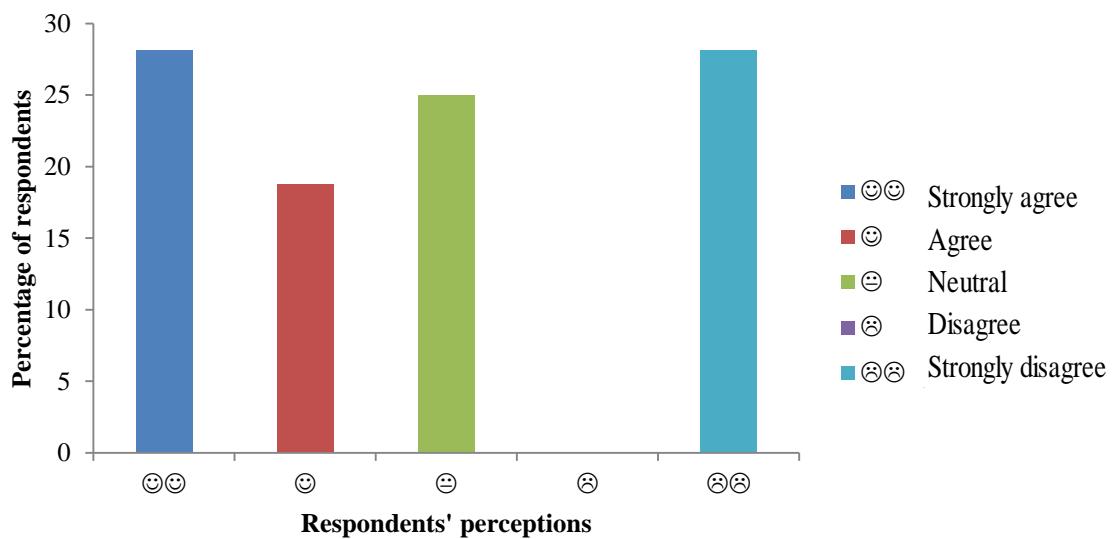


Figure 28: Shows whether the community need to be allocated land to farm wildlife

4.7 SUB-CONCLUSION

The results above show that the community likes wildlife. However, they have low tolerance because of the high human/wildlife conflict with little, inconsistent or no compensation. The community argues that there needs to be improved security for its members and livelihood assets while attempting to save wildlife. The community is only interested in plain game as they are a low risk, but there is concern that the wildlife economy requires high investment, including security. They recognise the potential to increase income from wildlife by allocating more land; however, there is higher risk that development will not be in the interest of the community. Moreover, the community does not believe that they will be allocated wildlife use rights, thus further restricting the ability to earn income. Without a secured title deed and legal support, the community is at risk of resettlement without compensation and loss of livelihood assets. More importantly, the community views the extension of wildlife farming as a modern form of colonialism where they are being enticed to freely allocate land to which they will lose access through stipulated regulations and policies for conservation and economic development.

4.8 FINDINGS AND ANALYSIS: POOR PEOPLE DETEST THE PARK AND POLICIES

Figure 29 suggests that about 34% strongly agree, 22% agree, 19% are neutral and 25% strongly disagree. About 56% of the respondents agree that the park policies are satisfactory compared to 25% who strongly disagree. During the feedback session, the respondents stated that the rules of Sabie Game Park are good as they aim to protect wildlife from criminals. However, there is a need for the community to also be able to access some important areas inside the park such as water and cultural burial sites. There was an agreement between the community leaders and the owner of Sabie Game Park that there will be a plan for the community to gain access, but this has not materialised. Instead, Sabie Game Park has become more colonialist in practice where there are restrictions on local community access; people no longer have the right to hunt and people are arrested for 'poaching' similar to colonial times. The park has stripped the community of community goods such as water and wildlife. In addition, the rules are good for keeping people outside the park, but not good for ensuring the wild animals stay inside the park. Moreover, the policies are designed to be enjoyed by non-Mozambicans, and this includes employment opportunities. The respondents stated that they are willing to support the protection of wildlife, but they would also like an opportunity to enjoy the wildlife which they are helping to conserve.

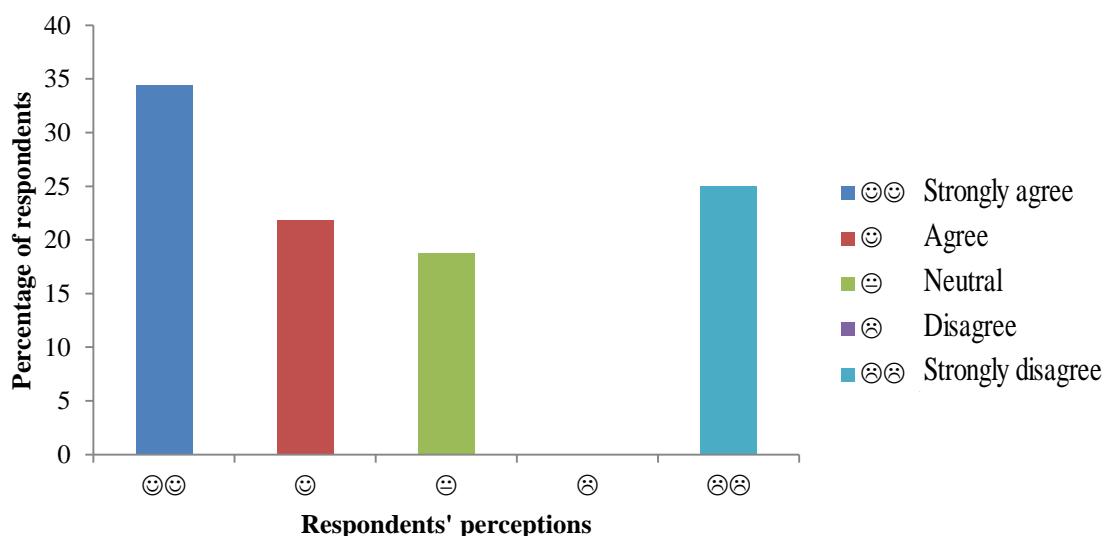


Figure 29: Shows whether people think the rules regarding access to Sabie Game Park are satisfactory

Figure 30 shows that an estimated 84% strongly agree, 3% agree, 3% are neutral and 9% strongly disagree. During the feedback session, the respondents indicated that the park managers are good people who are trying their best to protect the wildlife. The community has witnessed an increase in wildlife numbers since the establishment of Sabie Game Park. Most of the wildlife had been hunted for subsistence use during the civil war. There are some challenges when they interact with the community, especially in how they address community leadership. According to the respondents, park leaders have a tendency to undermine the community Chief with regards to his request for meetings. Other challenges include the biased implementation of park rules with regards to poaching. The respondents expressed the opinion that it is not clear who is arrested and detained, and repeat offenders are continuously released back into the community without having to stand trial. The wavering implementation of rules is creating conflict among community members.

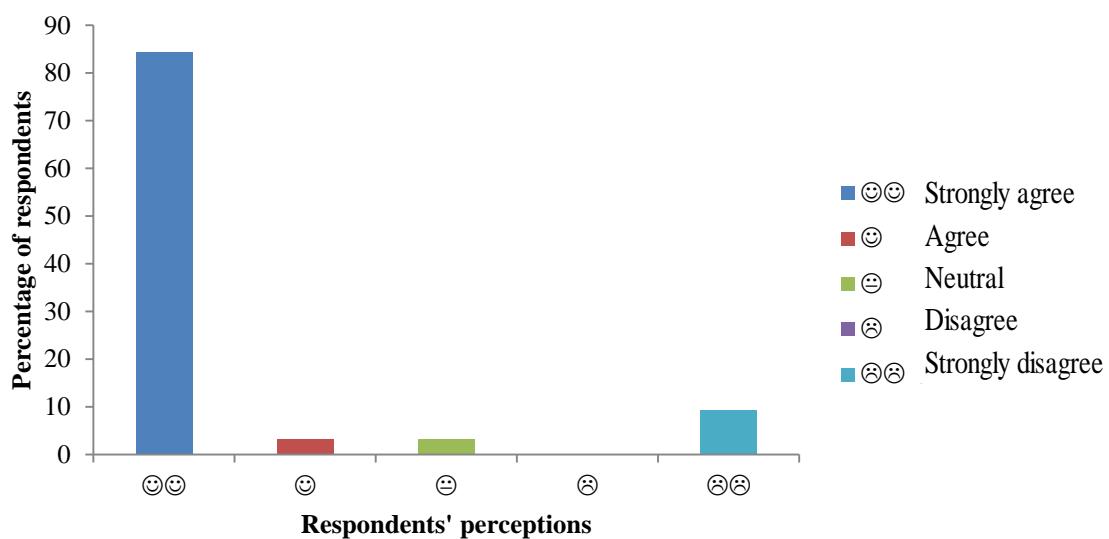


Figure 30: Do you think the managers of the park are satisfactory?

Figure 31 shows that about 44% strongly agree, 3% agree, 16% are neutral and 31% strongly disagree. Figure 31 shows that there is no consensus that the park managers are helpful to the community. It is not clear whether the park managers are helpful in the community as 47% think they are helpful compared to 36% who disagree. During the feedback session, the respondents stated that park managers assist the community with the construction of water boreholes, schools and clinics, as agreed during resettlement. The park managers have introduced the community to the CBNRM project which has been helping the community. Through the project, some people, such as the village police, receive employment to earn

income for their different households. On the contrary, some of the respondents argue that the park leaders do not keep their promises such as those made during the resettlements of people to establish Sabie Game Park. Many households have not received the infrastructure that was promised by the park and there has been no follow up with the community to explain why this has not happened. The community feels betrayed by the park managers who are not willing to attend meetings organised by the community. If the park managers were more willing to communicate with the community, people would be more understanding towards the problems the park may be experiencing. The respondents argued that this may be the main reason why people are not willing to support anti-poaching efforts. The respondents stated that the community cannot be loyal to a partner who is dishonest

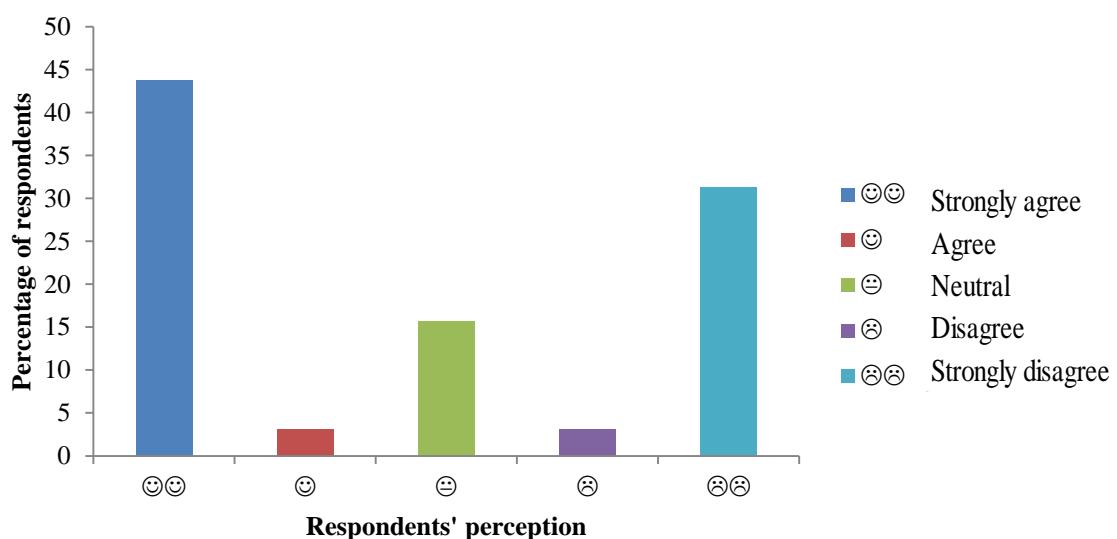


Figure 31: Illustrates whether people think park managers are helpful in the community

According to figure 32, about 47% strongly agree, 9% agree, 22% are neutral, 3% disagree and 19% strongly disagree. During the feedback session, the respondents indicated that they are not resentful of the fact that the park is on their land. The respondents who strongly agree suggested that the park has done a good job in managing the land and wildlife. However, it must always be clear that by law Sabie Game Park is not the owner of the land; the traditional authority still has rights over the land. However, there needs to be an agreement with the park to share the land with the community by allocating rights to access the park for important cultural purposes. Being able to enjoy the park will provide the community with a stronger reason to want to protect the park and wildlife.

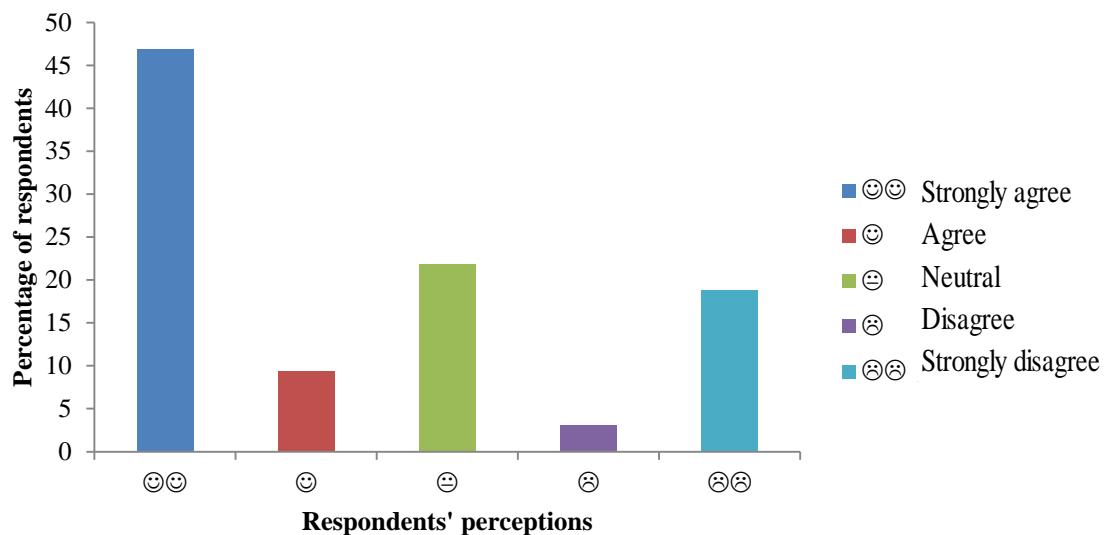


Figure 32: Shows whether people like the park even if it is on community land

According to figure 33 below, approximately 78% strongly agree, 6% agree, 9% are neutral and 6% strongly disagree. During the feedback session the respondents stated that the park has opened an opportunity for the community to receive benefits from wildlife. Even though the money is very little and the meat is not provided often, the community is happy to receive some reward for their effort. However, the park must bear in mind that it is not just about the meat and the money. The community also wishes to be granted rights to hunt for themselves and make their own money. Also they wish to meet with the owner of Sabie Game Park to discuss their concerns about human/wildlife conflict. Receiving handouts such as food undermines men's role in the household as providers and protectors of their families. Men wish to secure employment opportunities to earn an income. The men in the villages are losing their dignity because they are being treated in the same way as women, and as a result, social structures are being fragmented and men are becoming more desperate to provide. Young men are pursuing the same trend during desperate times to support their families.

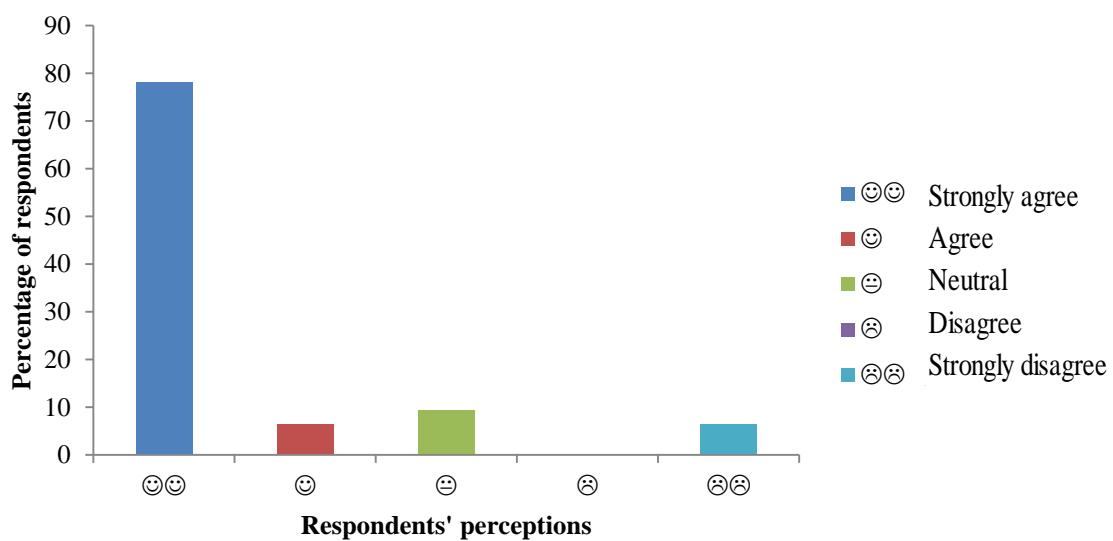


Figure 33: Shows whether people approve that the park gives the community meat and money

According to figure 34, an estimated 31% strongly agree, 13% agree, 9% are neutral and 47% strongly disagree. There is no clear division amongst the respondents as 44% agree and 47% strongly disagree that they are satisfied with the park owner's interaction with the community. During the feedback session, the respondents argued that the park owner needs to be more visible in the community to discuss important matters that negatively impact the community, including human/wildlife conflict and unfulfilled resettlement promises. In addition, the community feels undermined by the park owner who sends a representative in the form of a park manager to speak with the Chief. The Chief is the supreme body representing the community and hence, the park owner must attend meetings requested by the Chief and should recognise him as his equal. The Chief also needs to be included in the park's decision-making processes because some of the rules that are designed by the park also affect the subjects of the Chief. According to the respondents, the park managers are subordinate to the Chief but seem to exercise authority over the Chief as to how poaching issues should be addressed. The park owner and the managers do not recognise the role of the community in addressing illegal wildlife trade or involvement in conservation decision-making processes.

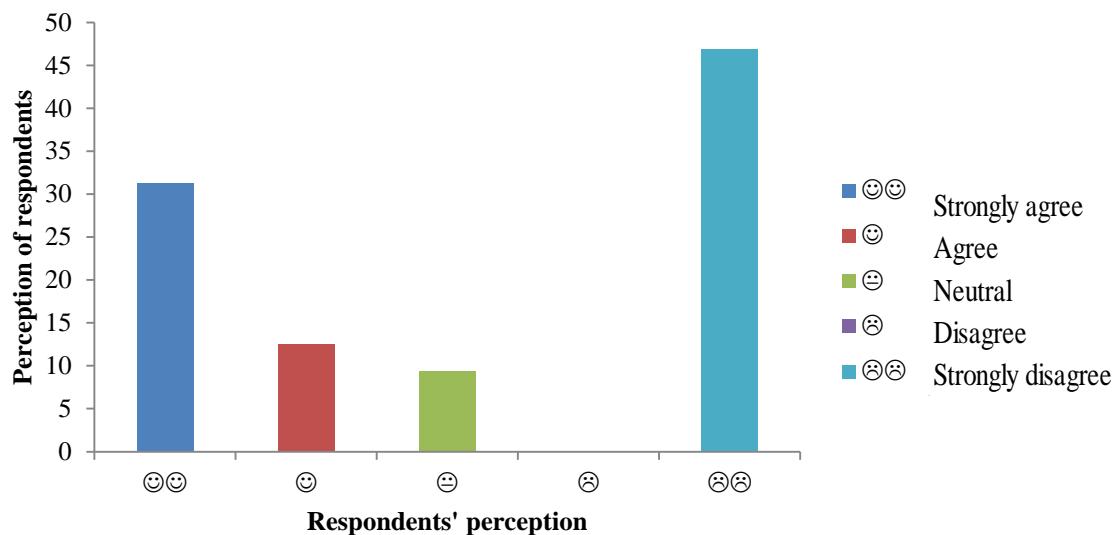


Figure 34: Illustrates whether people satisfied with the park owner's interaction with the community

According to figure 35, about 16% strongly agree, 9% agree, 9% are neutral, 3% disagree and 63% strongly disagree. During the feedback session, the respondents stated that the park only responds to matters affecting the animals and interests of the park. Issues affecting the community such as cattle theft, human trafficking and damage caused by animals are not interests of park managers. The respondents suggested that they do not feel that the park managers wish to see them develop but only aim to keep them as dependents. If the park leaders care about the community, they must invest more in the people to become independent to be able to support their families. When the community has problems with cattle theft, the park does not respond in the same way as when a suspected poacher is reported. The park leaders do not understand that the community also wishes to feel that their safety and security are a priority of the park managers. The park managers need to be reminded that poaching is a problem and that the community is also a victim of poaching as they are caught up in the middle, between anti-poaching demands from the park and lawless wildlife trafficking syndicates.

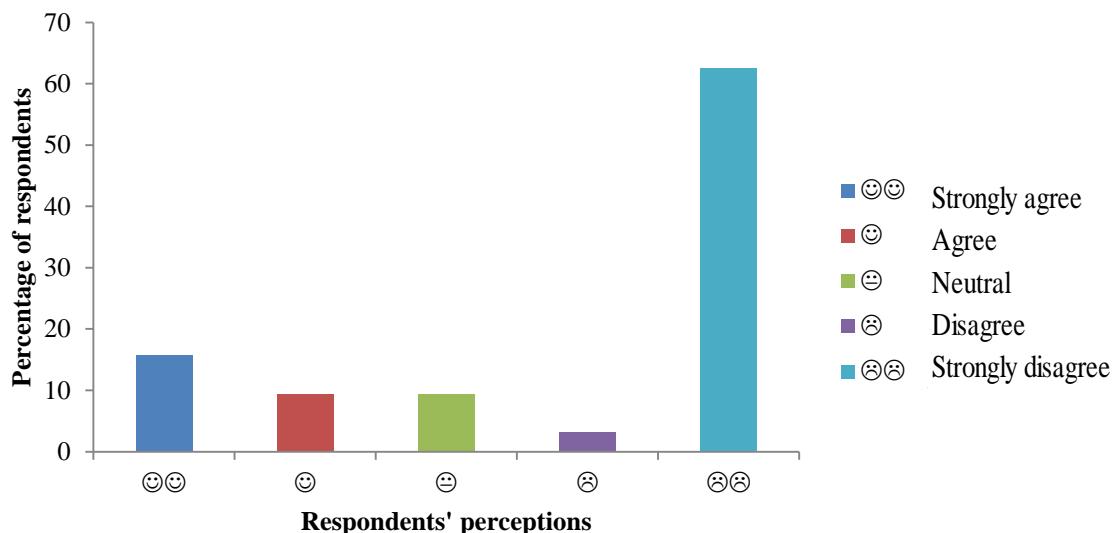


Figure 35: Shows whether people think that park managers care about the community

Figure 36 shows that about 22% strongly agree, 25% agree, 13% are neutral and 41% strongly disagree. There is no clear consensus that the community approves of park policies. There is no clear distinction whether park rules are good for the community as 47% agree and 41% strongly disagree. The respondents agreed that the park is making good progress towards protecting wildlife. While the wildlife increases, the park is neglecting to create policies to manage human/wildlife conflict. This shows that the park policies are concerned solely about animal welfare and not about the community and its development. The park responds to the needs of the community only when they want support with regard to high poaching incidences. The park is not willing to invest in keeping the community safe from wildlife and hence the community does not see the need to keep wildlife safe from people. The community does not feel it is a valued partner by the park as they are not involved in any decision-making process or consulted about what conservation means to the community. According to the respondents, the biggest challenge with regard to the park rules is that the community is denied access to natural resources inside the park. These rules are similar to those of colonialists where boundaries were created and rules set out to further impoverish the rural communities.

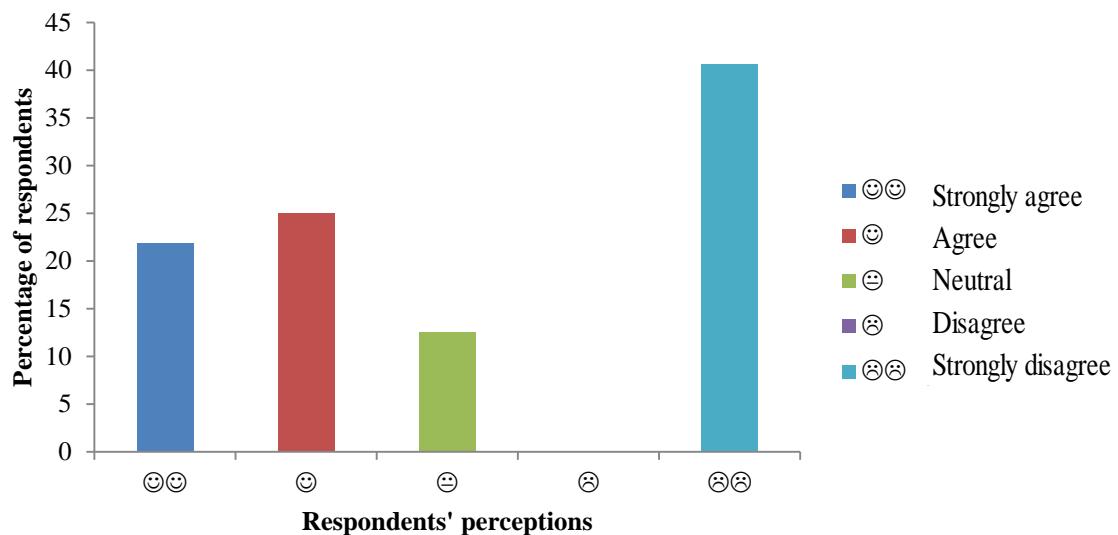


Figure 36: Shows whether people think the rules of the park are good for the community

According to figure, about 37% strongly agree, 21% agree, 9% are neutral, 3% disagree and 19% strongly disagree. About 68% of the respondents agree that the park is important while 19% disagree. The respondents stated that the community recognises that economic development opportunities associated with the park, such as employment and the positive increase in wildlife numbers, are to their advantage. Even though the park is making a positive impact on wildlife numbers, the community does not experience the intrinsic value as they are not allowed, or afforded the rights to enjoy the presence of wildlife. Additionally, employment opportunities are reserved for foreigners from South Africa and Zimbabwe. The community may not have the skills and education required to successfully fill all the roles inside the park, but the park is not investing in the community to be able to do the work.

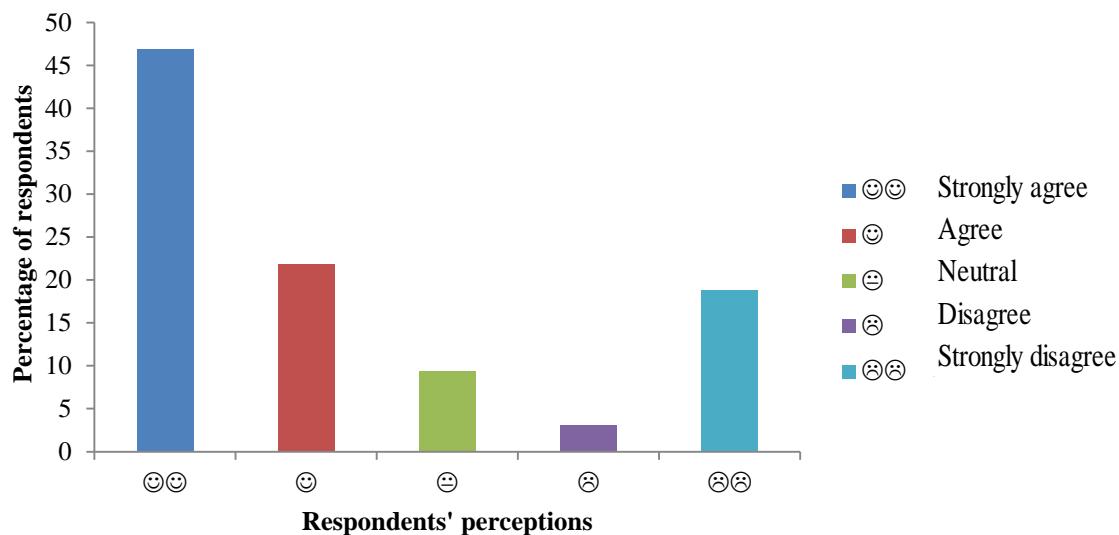


Figure 37: Shows whether people think that the park is important

According to figure 38, approximately 38% strongly agree, 13% agree, 25% are neutral, 6% disagree and 21% strongly disagree. About 51% of the respondents agree and 27% disagree. During the feedback session, the respondents alluded to the fact that the park has made efforts in the past few years to build the skill of people in the community to be able to lead their own future through the CBNRM project. The community has received money, but has been unable to share it equitably – they keep hearing that the money is missing from bank accounts. According to the respondents, the people are given an opportunity to manage their own money, but they are failing to govern themselves. The respondents acknowledge that the park is trying, but the people need to also learn to be trustworthy because they are ruining the reputation of the community and other poor communities who are in dire need of similar development opportunities. The respondents added that the park has done more for the community than the government did in the past few years. However, this does not eliminate the fact that the owner of the park needs to meet with the community to address human/wildlife conflict issues.

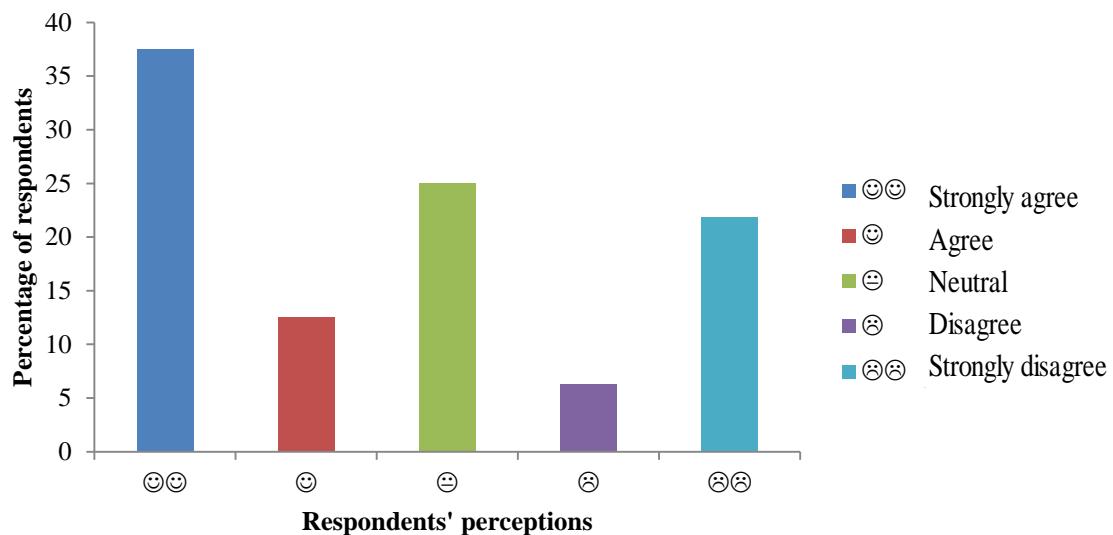


Figure 38: Shows whether people think that the park contributes to community development

Figure 39 suggest an estimated 63% strongly agree, 22% agree, 6% are neutral and 9% strongly disagree. During the feedback session, the respondents stated that the fence is a good barrier to keep predators and problem wildlife away from the community. The fence is also effective in keeping poachers away from wildlife, but the park needs to invest in upgrading the fence that has been damaged or corroded. This results in wildlife escaping and subsequently threatening livestock and human lives. Additionally, Sabie Game Park needs to communicate with the community to agree on a satisfactory and consistent compensation scheme for damage and losses caused by wildlife

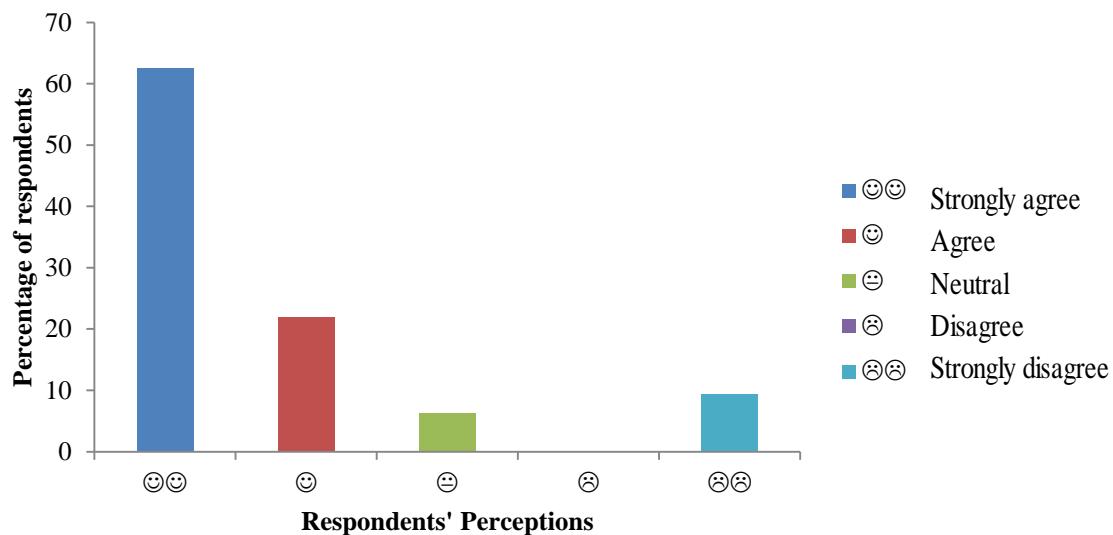


Figure 39: Illustrates whether people like the fence around Sabie Game Park

Figure 40 below shows that about 22% strongly agree, 19% agree, 13% are neutral, 3% disagree and 44% strongly disagree. There is a halfway split as 41% agree that the relationship with Sabie Game Park's owner is satisfactory while 44% strongly disagree. During the feedback session, the respondents stated that the Sabie Game Park owner needs to meet with Chief Mangalane to address the challenges related to human/wildlife conflict and the rights for the use of natural resources. Additionally, the community is also a victim of crime caused by poachers and both parties need to work together to draft a plan on how to counter this. Moreover, Sabie Game Park needs to acknowledge that poachers are attracted by rhinos and elephants. These animals need to be removed to improve relationships.

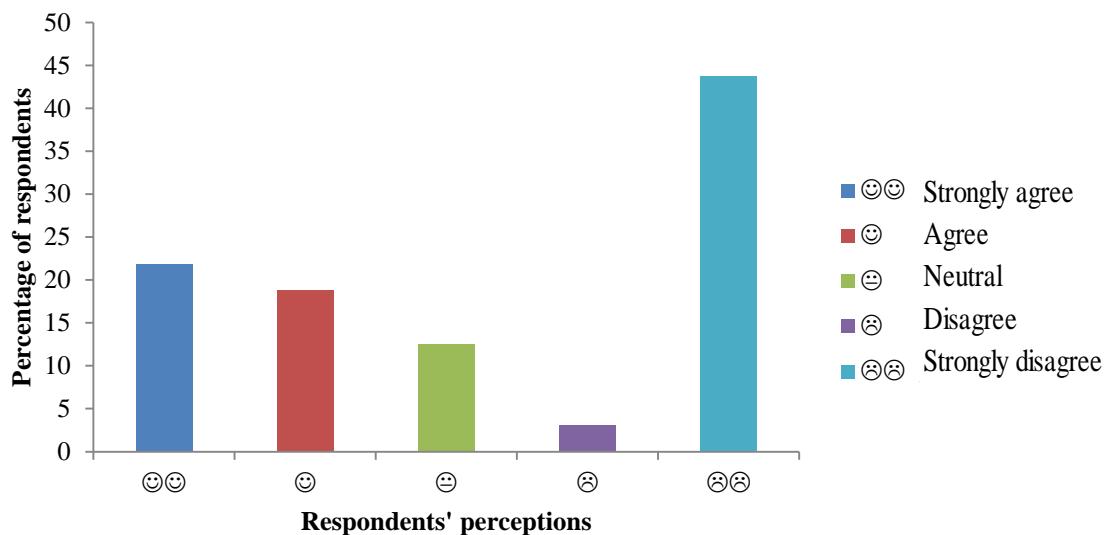


Figure 40: Illustrates whether people think the community's relationship with Sabie Game Park's owner is satisfactory

4.9 SUB-CONCLUSION

The community recognises the positive impacts of Sabie Game Park with regards to wildlife conservation. Notably, wildlife numbers have increased in contrast to the situation during the civil war when they were almost non-existent as there was no governance. The community also agrees that Sabie Game Park has done a good job with managing biodiversity and that park managers are doing their best to improve the quality of the environment. However, the challenge is that the rules that have been created do not have a positive impact on the community. The community no longer has the right to hunt, and has no access to water, cultural and burial sites. These restricting rules are described by the community as a modern form of colonialism negatively impacting on the community's willingness to support anti-poaching operations. These 'colonial' policies and regulations are enforced on the community and are not communicated to ensure common understanding. Similarly, Sabie Game Park must recognise that the community is also negatively affected by criminal syndicates and they need to work together to develop plans to create safer communities for safer wildlife. However, human/wildlife conflict is also a huge challenge for the community as they feel that the park does not efficiently address damage caused by wildlife in the community. In addition, compensation for damage and losses are slow in forthcoming and not satisfactory for the respective complainant. These are issues that need to be discussed with the owner of

Sabie Game Park. However; he is never present to engage with the community or community Chief to address challenges.

4.10 FINDINGS AND ANALYSIS: POOR PEOPLE DETEST PARK RANGERS

Figure 41 shows that about 21% strongly agree, 24% agree, 9% are neutral and 46% strongly disagree. There is a split among the respondents as 45% agree and 46% disagree. During the feedback session, the respondents argued that the community is experiencing high crime since the rhino poaching issue became a problem. The respondents assume that the poachers are also responsible for cattle theft and human mutilation problems. However, the park rangers do not respond to safety and security issues relating to the community, but are only responsible for protecting wildlife. The respondents acknowledge that the role of community safety should be addressed with government law enforcement, but the community does not trust the officials and the area is inaccessible. The community recognises the rangers in the park as their first point of contact for illegal activity, but the response is often delayed compared to when they report wildlife crimes. Those who agree that rangers protect the community stated that they have been receiving assistance from park rangers, including the removal of buffalos from their crops and transport which is beyond obligation

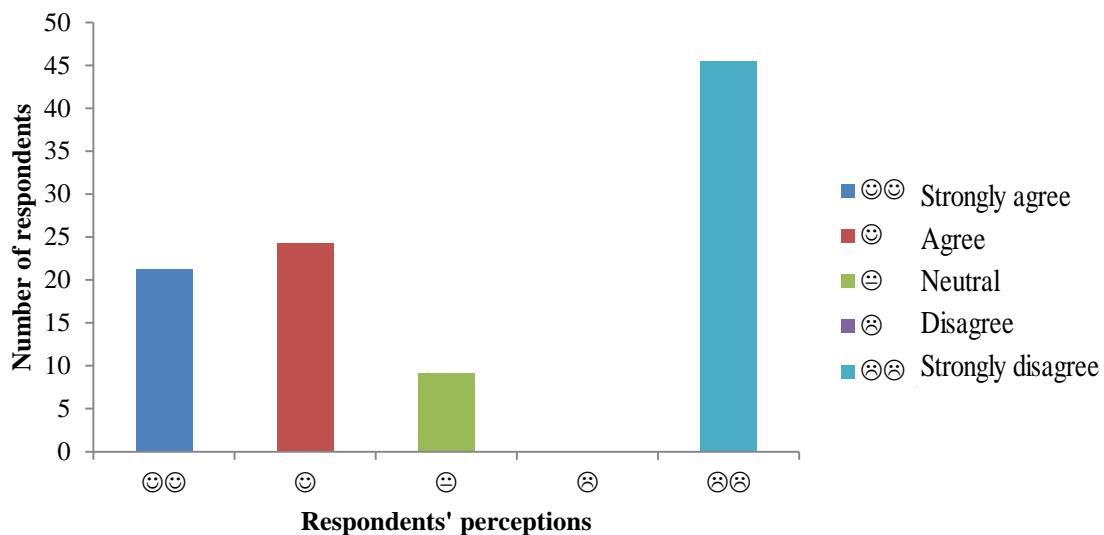


Figure 41: Illustrates whether people think park rangers protect the community

According to figure 42, about 53% strongly agree, 9% agree, 9% are neutral and 28% strongly disagree. About 62% of the respondents support the work of park rangers, while 28% strongly disagree. During the feedback session, the respondents stated that they support the park rangers in apprehending the suspected poachers because they are also affected by crime and criminal syndicates in the community. However, the community does not feel that there is a safe anonymous platform for them where they can report criminals. Those who report criminals are known in the community and are at risk of being intimidated by the criminal syndicates. Those who do not support the park rangers argue that the park rangers do not respond when the community complains about crimes they experience. The rangers expect help from the community, but are not willing to support the community and the respondents suggested that what is good for wildlife must also be good for members of the community.

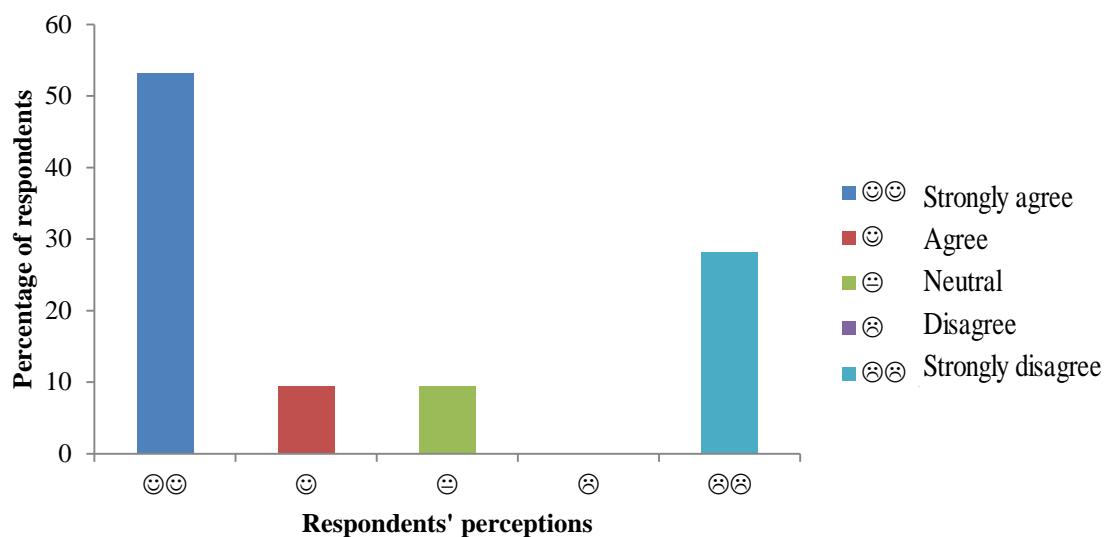


Figure 42: Shows whether people think that the community supports work done by park rangers

According to figure 43, about 34% strongly agree, 13% agree, 22% are neutral and 31% strongly disagree. An estimated 47% agree compared to 31% who strongly disagree. During the feedback session, the respondents stated that there were many times that the rangers had falsely accused innocent members of the community of being poachers. In most cases, the rangers use force to address issues rather than attempting to talk to the people and investigate the matters properly. The rangers invade people's homes without permission and the people feel that they are being disrespected and that their human rights are being undermined. The rangers do not recognise or acknowledge community processes and the role of the community leadership in such matters. Others say the authorities are not informed about home raids and subsequently they feel that they are being abused by the rangers. According to the respondents, such behaviour is unacceptable as it negatively impacts on community attitudes towards the park. The respondents further added that if the rangers continue to inflict fear in the community, it would only be a matter of time before the community responds in a similar way.

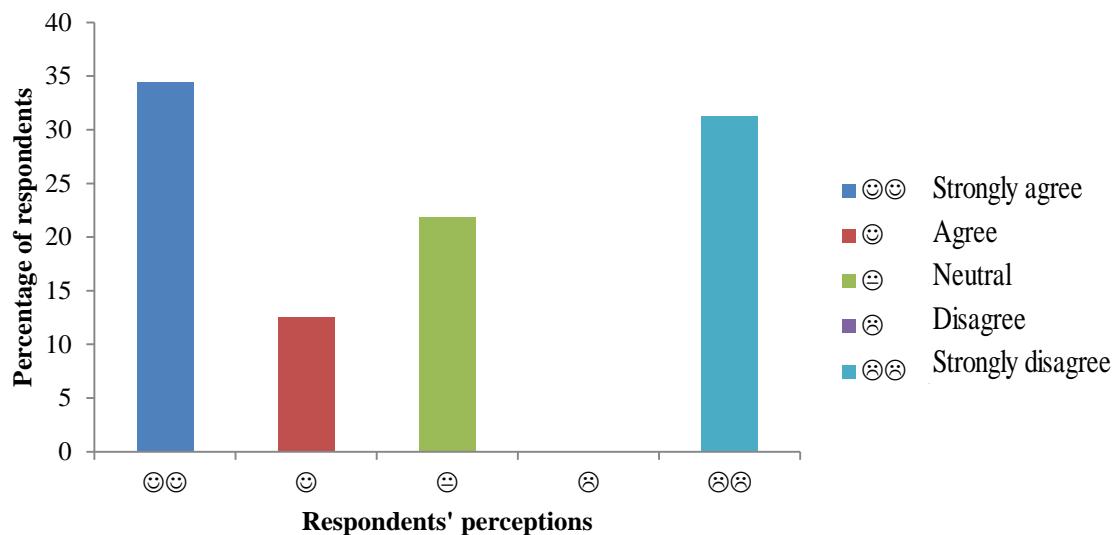


Figure 43: Illustrates whether people think that the attitude of the park rangers towards the community is satisfactory

Figure 44 shows that about 56% strongly agree, 16% agree, 6% are neutral, 6% disagree and 16% strongly disagree. Approximately 72% of the respondents agree compared to 22% who disagree. During the feedback session, the respondents stated that more rangers are needed to assist with crime in the community as criminal careers are becoming more attractive to young men. Those who disagree argue that relationships with the park are fragile and adding more rangers, who will be foreigners, will exacerbate the existing tensions. The rangers do not support the interests of the community as their main mandate is to protect the park and policemen appointed by the state should be present to assist the community. The respondents further added that the existing government law enforcement officials, *Fauna Bravia* is under-resourced compared to park rangers and unable to successfully tackle crime or challenge with criminal syndicates

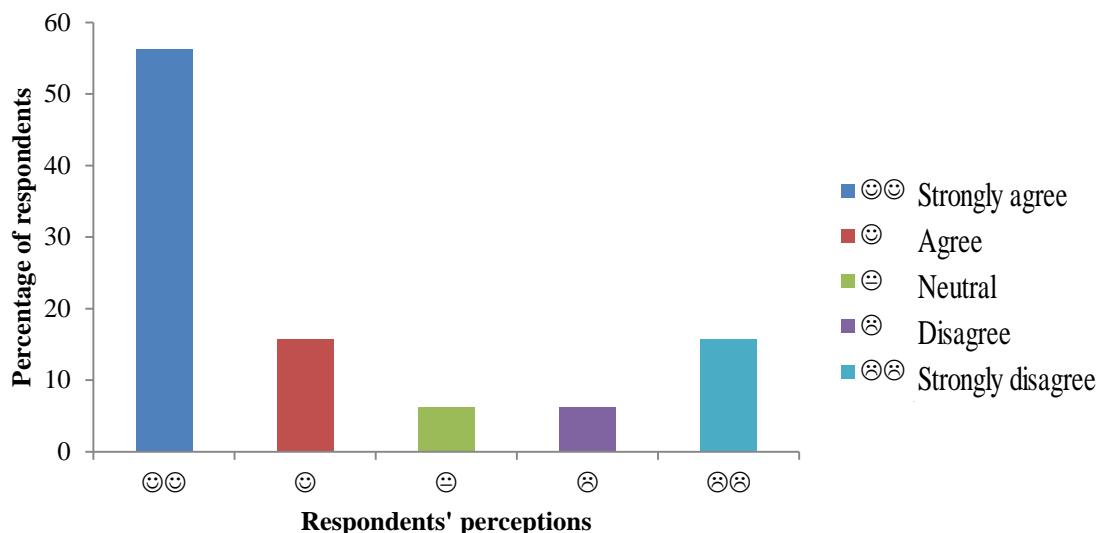


Figure 44: Demonstrates whether think that the park needs to have more rangers

Figure 45 shows that about 50% strongly agree, 9% agree, 13% are neutral, 3% disagree and 25% strongly disagree. An estimated 59% agree that rangers should be employed from the ranks of the community compared to 28% who disagree. During the feedback session, the respondents argued that the park was the only income-generating opportunity available to the community, yet priority is given to foreigners. In addition, the work done by the rangers is very sensitive and requires certain skills which the people from the community do not possess because access to education opportunities is limited. Those who disagree argue that employing rangers from the community would result in a conflict of interests as the law would be difficult to enforce where relatives and friends are concerned. The respondents suggest that there will be potential conflict amongst families if a member of one family reports illegal activity being done by another family in the community and this could result in an unwarranted confrontation. Social cohesion is of high priority to the community due to the recent civil war. Thus it can be observed that social cohesion is not only strengthened by social norms, cultures and practices, but history and social security also play a critical role in reinforcing trust. Any gaps in their traditional systems are taken advantage of by criminal syndicates to further divide the community.

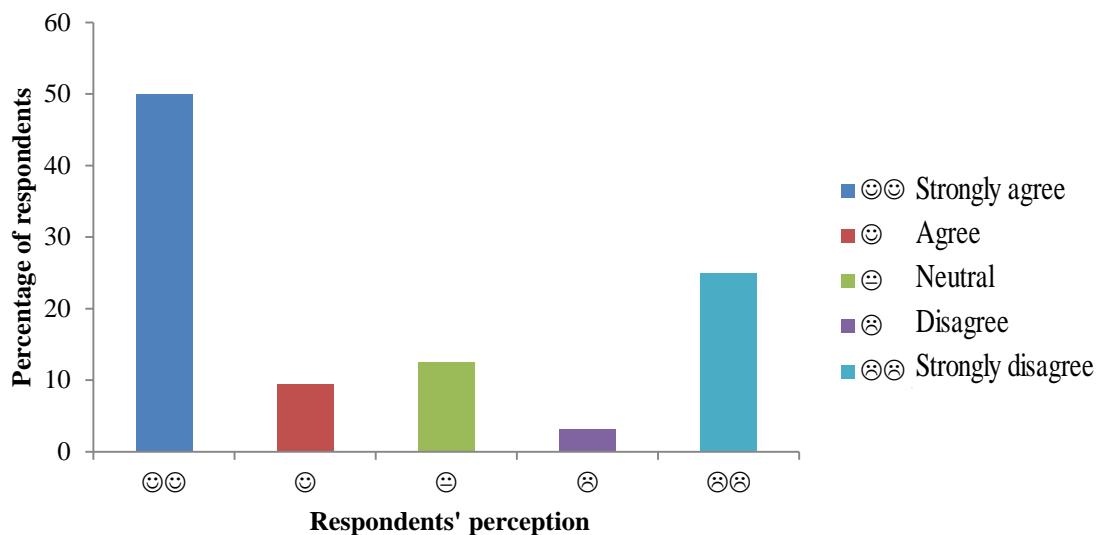


Figure 45: Shows whether people think rangers should be employed from the ranks of the community

4.11 DISCUSSION

The assumption that poverty results in poaching is omnipresent. However, this study agrees with Duffy and St John (2013) that poaching is driven by wealth and the unfair distribution of access to natural resource rights. Hübschle (2016) states that the difference between poaching and hunting amongst community members around South Africa's Kruger National Park is highly contested. The definition of poaching such as "the illegal shooting, trapping or taking of game or fish from private or public property" (Hübschle, 2016:8) redefines property rights usually from locals to state or private property. As a result, a resource that was once legal, like subsistence hunting is now illegal. By this definition and results of this study, poor people poach as they do not own or have access to wildlife. Similarly in the Mangalane community, there is strong partition in the community to be allocated hunting permits as wildlife is a public good which they once had access to. The community feels that by poaching or participating in IWT, they are taking what they rightfully own, but they are being prosecuted for it. This is a similar ideology to that of the 17th century poem, 'Stealing the goose from the commons' (Walljasper, 2013):

The law locks up the man or woman
Who steals the goose off the common

But leaves the greater villain loose
Who steals the common from the goose.
The law demands that we atone
When we take things we do not own
But leaves the lords and ladies fine
Who takes things that are yours and mine.
The poor and wretched don't escape
If they conspire the law to break;
This must be so but they endure
Those who conspire to make the law.

The findings of this study also clearly illustrate the impacts of economic vulnerability of poor people who are manipulated and intimidated by those who have economic power (Millar and Glendinning, 1989) (see section 2.2).

Poor people do not detest park rangers, but there is ongoing concerns of the use of (para)military law enforcement in anti-poaching operations that is heavily criticised for its violent nature that often infringe basic human rights such as the right to a life, right to privacy, no torture among others (Massé et al., 2017) and calling for alternatives. However, in areas like the Mangalane community where there is weak law enforcement capacity and operational resources, criminal syndicates often use their power of intimidation to commit other crimes in the community such as human trafficking, human knee cap mutilation and cattle theft that violate other human rights such as freedom of expression, the right to democracy, the right to social security, the right to public assembly including the aforementioned. In such cases, community members are unwilling to report illegal activities related to wildlife trafficking fearing for their own lives. There is a need to invest in the improvement of police officials to secure social security of citizens prior to understanding the type of anti-poaching operation that is required in a specific context. The Mangalane community also disagrees with the para military style of anti-poaching operations include the invasion of people's homes. However, the community also appreciated the work done by rangers to assist with improving community safety where possible. Mangalane community is an example of poor law enforcement and high lawlessness where people also do not approve of poaching activities and the lawlessness it attracts. Additionally, an empirical study conducted by Steinmetz *et al.*, (2014) showed no correlation between increased patrol and

decline in poaching activities. Rather, behaviour change survey conducted concluded that people's behaviour changed as a result of increased community outreach programme. In this way, community members felt that their knowledge valued and useful to incorporate in park management plans.

William and Hutton (2007) argue that the it is within people's rights to detest protected area policies because many 'people and parks' programmes have not address the core issue of access to resources and right. Rather, they have merely repackaged exclusionary policies. It is in such a context in which Paavola (2004:68) advocates for social justice in environmental management rather than simply focusing on economic and species welfare (see section 2.3). This argument is similar to the statement that the people from the Mangalane community presented, suggesting that colonial policies excluded them from natural resources based on race, while contemporary policies exclude access based on social class and income status which still marginalises the same group of people who were excluded during colonialism. This view strongly collates with Holmes (2003) suggestion that poaching and reluctance by communities to assist in anti-poaching initiative can be seen as a political protest against conservation policies and their exclusionary nature (see section 2.3). This view suggests that traditional natural scientist need to undergo self-criticism for lack of understanding the political ecology in which protected areas were created and exist.

Regarding poor people's attitude toward wildlife, most studies have focused on the ecological relationship of human-wildlife conflict with little or no attention to socio-cultural influences that affect people's response to interaction with wildlife. A study conducted by (Mir *et al.*, 2015) argues that people's attitude towards wildlife is highly influenced by the notion that government care for wildlife more than people. In the case of Mangalane community, the lack of accountability of Sabie Game Park for compensation for losses caused by wildlife is a major influencer of negative attitudes towards wildlife. People of Mangalane community are subsistence farmer of cattle and maize which are highly valued livelihood assets by owners. The negative attitude is exacerbated by the frequency of having to deter wildlife animals from livestock, crops and families often with failure. A study conducted by Snyman (2013) also indicates that people who own livestock or crops are more likely to display negative attitudes towards wildlife as a result of the threat to their livelihood assets. In such cases, poaching and inflicting harm on wildlife with the intention of retaliating against the game reserve is according to Soto *et al.*, (2001) a weapon of the marginalised in order to be heard.

Poverty cannot be ruled out as a contributing factor for influencing involvement in poaching and illegal wildlife trade. However, based on each context, a project implementer must be cognisant of the different degrees of poverty and presumed wealth in different societies. Poachers in rural areas may be described by their counterparts as being wealthy yet there are considered poor by urban dwellers. However, irrespective of the degree of poverty, poaching and illegal wildlife trade can be seen as a way for 'poacher' to liberate themselves from one level of poverty to a lesser vulnerable. To a large degree, CBNRM attempted to respond to vulnerability as result of poverty and give power to the poor, but the complexity of poverty challenged the approach in implementation by elite capture at community level.

Based on the above, one can argue that there are two types of poverty and results in different types of involvements. Those who experience relative poverty (see section 2.2) are more likely to be recruited by poachers as they usually have the resources such as axe to poach. They are driven by hunger for social status and power within the community. Additionally, their power is often misused to intimidate those who are in absolute poverty (see section 2.2) to provide information, accommodation, prostitution and defeating the ends of justice by not reporting crime. The different typologies of poverty that can exist within one community divide the community into poachers and victims of poaching. Additionally, the much poorer community are victims of crime from relatively poorer neighbouring communities where the absolutely poorer community is intimidated to participate in illegal activities. Thus people's different socio-economic positions within their community determine the potential involvement in the poaching network. Conservation is mainly concerned with those who kill rhinos, and disregard their power manipulate community to defeat the ends of justice by intimidating them.

CHAPTER 5

CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

It is particularly true that lack of access to income opportunities contributes to poaching. However, with regard to those who do have it, literature argues that poaching has contributed to the development of certain members of society to occupy a different social class. As such, continuous involvement in poaching is to retain social standard and influence. Involvement in poaching is tolerated by some members of the community who benefit from IWT as informants for poachers, providing accommodation, owning small businesses, such as *shebeens*, and being in a position to make other contributions to the functions of the

community, such as transportation needs. As such, the incentive for supporting IWT is high for certain individuals.

The high military investment in the park does not pose a high risk for those involved in IWT, nor does the community see a need to support protected areas in reporting illegal activities as there are no shared responsibilities between the community and the park. However, safety and security are a big concern for the communities who argue that the presence of rhinos attracts crime by which they suffer, but the park is unwilling to support them when they have to cope with lawlessness such as cattle theft. The Mangalane community argues what happens behind the fence is the problem of the park and what happens outside is the concern of the community.

There are many who see the benefits of environmental education, but the way information is packaged and the intended messaging must be clear. It is evident to the Mangalane community that there is something special about rhino horn, such that people are willing to lay down their lives to protect it or hunt it. Poor packages communications information can invoke curiosity about rhino horn poaching and presumed benefits thereof further motivate involvement in IWT.

The community is further concerned that high value species such as rhinos and elephants attract criminals and brings unlawful behaviour to the community. As such, the removal of the species will contribute to peace building between the park and community. This argument was raised by the community from the premise that they like the park, but the community is also at risk to experience criminal behaviour, and that both parties must be responsible for safety behind and beyond the fence. In addition, young men are constantly recruited by criminal syndicates to become part of lawless gangs in the community associated with other violent behaviour, including livestock theft, as part of their initiation prior to poaching in the park.

The type of access to the park requested by the community is not clear, but it is obvious that the community feels that they should have rights and freedom to access the park as necessary, including privacy when performing traditional and cultural rituals. The actual practicality in this regard is not clear considering the high poaching risk to the park. Yet, the magnitude of the risk is also high for the community whose wish it is to enter the game park unsupervised.

The rhino poaching issue is an extremely complex one fragmenting relationships between members of the same community, adjacent communities, protected areas, civil society and government. The complexity has added to the infringement on human rights by protecting wildlife through military force. The Mangalane community does not identify poachers as bad people, because as a traditional society, they do not believe in shaming and isolating individuals as this contributes to the development of social solidarity among the excluded individuals resulting in gangs and high crime (see section 2.5). The community fears that the increased militarisation of protected areas fragments social cohesion and promotes gang formation. Fundamentally, the Mangalane community wants consideration for Reintegrative shaming in law enforcement rather than stigma which tend to fragment their community and worsen crime. The challenge with the rhino crime is that is based on punishment presented by external individuals rather than a moral act that is detested by the community as unacceptable and unthinkable. Hence, it makes no difference to offenders that there is prison punishment or possible death from participating in illegal wildlife trade.

Nevertheless, the recognition of wildlife crimes has brought the spotlight on other crimes such as human trafficking and cattle theft that negatively affect local communities. Hence, the deterrent of criminals from wildlife crimes indirectly contributes to societal safety and security in the neighbouring community. The impacts of rhino poaching at local level are undeniable, resulting in the conflict amongst Africans. Accordingly, criminals through corruption are able to navigate the dysfunctional relationships to gain access to rhino horn. Noting the interrelatedness of criminal offences, policy makers, protected area managers and communities must work together to co-develop approaches to address illegal wildlife trade.

In addition, lack of capacity with regard to state law enforcement at court level has negative impacts on the relationships between the park and the community as repeat offenders are released back into the community. The community perceives such actions as bias from the park rangers towards certain members of the community rather than weakness in state systems.

The vision of park owners in the community to engage with community leaders is critical in fostering long term relationships. Traditional authorities do not recognise park managers as their equal to discuss critical issues and make decisions.

Socio-economic themes such as poverty, human/wildlife conflict, land use and natural resource use rights influencing involvement by communities in illegal wildlife trade are interwoven in other complex issues related to social safety and security, the relationship between park and community and law enforcement governance at state level. Crime is unacceptable in the community, and people desire to live in an environment where they are not threatened by criminals and wild animals, where land use practices can be mutually agreed upon between park owners and traditional authority, and a place where criminals are effectively dealt with in accordance with national law and without bias or corruption.

It is clear, however, that poverty holds a strong core in moral decision-making regarding right and wrong. However, morality is not equivalent from one society to the next. People are willing to support any initiative that will ensure their survival from one day to the next. The negative impacts of illegal wildlife trade at a larger scale and ripple effects are not unknown to rural communities but occupy a smaller role compared to other needs such as food.

Moreover, poor communities are unlikely to support any conservation initiative that does not address their needs equally to those of conservation interests. It is thus the responsibility of conservation officials to ensure that people living around protected areas perceive higher benefits from having a protected area compared to another land use plan. The perceived benefits must translate to both tangible and intangible benefits realised by means of economic transformation and respect for cultural norms and traditions. Fundamentally, people's behaviour is according to their perceptions regardless of how truthful or untruthful the viewpoint may be.

Moreover, this study has recognised the importance of involving local communities in addressing issues of illegal wildlife trade through nurturing positive relationships and shared social and environmental goals between the two parties, namely the community and Sabie Game Park. Such relationships strengthen governance base at local level thereby increasing the risk for poaching syndicates infiltrating the system. Strengthening relationships and shared governance goals will result in the reproduction of shared norms and ethics towards addressing crime, including wildlife crime. Corruption is a recurring theme that is embedded in all levels of illegal wildlife trade and must be addressed effectively as it is the biggest threat to all efforts deployed, including law enforcement.

Working with communities alone is not the ultimate solution, but forms a critical component to the multifaceted web of different actors required to work together, including the private sector, land owners and concession holders, NGOs and government, with different skills, all of equal importance, in biological science, law enforcement, enabling policy frameworks, and technology to name a few. However, success lies in collaboration, research and communication.

5.2 RECOMMENDATIONS

- a. Co-develop strategies to involve community in wildlife economy including making provision for wildlife business capacity development
- b. Review policies to ensure community natural resource use rights
- c. Develop plans to improve and support community safety and security as they are also affected by criminal syndicates
- d. Need to investigate the applicability of reintegrative shaming approaches or similar approaches in rural communities to address illegal wildlife trade to be linked to formal legal system and implemented where possible.
- e. Involve local communities in conservation policy development and decision-making process

5.4 SUMMARY OF CONTRIBUTION

This study has attempted to contribute to the understanding that economic benefits are important as well as reducing human/wildlife conflict, but altruistic ethical norms must be equitably instilled to reduce and prevent criminal behaviour while revitalising social cohesion. Criminal syndicates have capitalised on fragmented social structures to infiltrate local communities and establish notorious gangs who have been isolated from society, thus approach like reintegrative shaming need to be investigated and made applied where possible. Mechanisms to address IWT must recognise the role of fair and meaningful community participation in decision-making processes, especially in communitarian societies.

5.5 FUTURE RESEARCH

Future research needs to explore the use of indigenous knowledge systems and their impact in maintaining law and order in rural societies and how these can be incorporated in the modern justice system.

REFERENCE LIST

Adams, W, M., and Hutton, J. 2007. People, Parks and Poverty: Political Ecology and Biodiversity Conservation. *Conservation and Society*. 5, 2. pp 147-183.

Alexander, S.E. 2000. Resident attitudes towards conservation and black howler monkeys in Belize: the community baboon sanctuary. *Environmental Conservation*. 27, 4. pp 341-350.

Atkinson, A.B. 1989. *Poverty and social security*. New York.

Barnes, J.I., Macgregor, J. and Weaver, I.C.C. 2002. Economic efficiency and incentives for change within Namibia's community wildlife use initiatives. *World Development*, 30, 4. pp 667-681.

Biggs, D., Cooney, R., Roe, D., Dublin, H.T., Allan, J.A., Challender, D.W.S., and Skinner, D. 2016. Developing a theory of change for a community-based response to illegal wildlife trade. *Conservation Biology*, pp 1-8.

Bilale, F.J.C. 2007. Education performance in Mozambique: An economic perspective. Department of Economics, Stellenbosch University. Moab's Thesis Stellenbosch.

Braithwaite, J. 1989. *Reintegrative shaming*. Australian National University. [Online] available at: http://johnbraithwaite.com/wp-content/uploads/2016/05/2000_Reintegrative-Shaming.pdf (18 September 2018).

Büscher, B. and Ramutsindela, M. 2015. Green violence: rhino poaching and the war to save Southern Africa's Peace Parks. *African Affairs*, 115,458. pp 1-22.

Carrilho, J., Abbas, M., Chidassicua, J. and Mosco, J. 2015. Food security and nutrition challenges in Mozambique. *Observatório do Meio Rural*. [Online] available at: https://docs.wfp.org/api/documents/WFP-0000019827/download/?_ga=2.147872510.819291640.1537284326-466858755.1537284326 (20 August 2016).

Chambers, R. 1995. Poverty and livelihoods: Whose reality counts? *Environment and Urbanisation*, 7,1, pp 173- 204.

Child, B. 2012. The sustainable use approach could save South Africa's rhinos. *South African Journal of Science*, 108, 7/8 Pp 1-4.

Child, B. 2014. Parks in transition: adapting to a changing world. *Oryx*, 48,4. pp 469-470.

Child, B. and Jones, B. 2006. Practical tools for community conservation in Southern Africa. *Participatory Learning and Action*, 55. pp 1-138.

Chimbutane, F. and Benson, C. 2012. Expanded Spaces for Mozambican languages in primary education: Where bottom-up meets top-down. *International Multilingual Research Journal*, 6,1. pp 8-21.

Cooney, R., Roe, D., Dublin, H., Phelps, J., Wilkie, D., Keane, A., Travers, H., Skinner, D., Challender, D.W.S., Allan, J.R. and Biggs, D. 2016. From poachers to protectors: Engaging local communities in solutions to illegal wildlife trade. *Conservation Letters*, 10. pp 367-374.

Cross, M. 1987. The political economy of colonial education: Mozambique, 1930-1975. *Comparative Education Review*, 31, 4. pp. 550-569.

Duffy, R. 2016. War, by conservation. *Geoforum*, 69. pp 238-248.

Duffy, R. and St John, F. 2013. Evidence on demand, climate, environment, infrastructure and livelihoods. [Online] available at: <http://dx.doi.org/> (04 March 2017).

Duffy, R., St John, F.A.V., Buscher, B. and Brockington, D. 2015. Towards a new understanding of the links between poverty and illegal wildlife hunting. *Conservation Biology*, 30, 1, pp 14-22.

Emslie, R. and Brooks, M. 1999. *African rhino: Status survey and conservation action plan*. IUCN/SSC. African Rhino Specialist Group. IUCN, Gland, Switzerland and Cambridge, UK.

Foundation for Environmental Conservation (FEC). 2015. The militarization of anti-poaching: undermining long term goals? *Environmental Conservation*, 42,4, pp 345 -348.

Gandiwa, E., Heitknig, I.M.A., Lokhurst, A.M., Prins, H.H.T. and Leeuwis, C. 2013. Illegal hunting and law enforcement during a period of economic decline in Zimbabwe: A case study of northern Gonarezhou National Park and adjacent areas. *Journal for Nature Conservation*, 21. pp 133-142.

Gibson, C. and Marks, S .1995. Transforming rural hunters into conservationists: An assessment of community-based wildlife management programs in Africa. *World Development*, 23, 6. pp 941- 957.

Hauck, M. and Sweijd, N.A. 1999. A case study of abalone poaching in South Africa and its impact on fisheries management. *ICES Journal of Marine Science*, 56. pp 1024-1032.

Holmes, C.M. 2003. The influence of protected area outreach on conservation attitudes and resource use patterns: a case study from western Tanzania. *Oryx*, 37, 3. pp 304 – 315.

Hübschle, A. 2016. Security coordination in an illegal market: the transnational trade in rhinoceros horn. *South African Journal of Political Studies*, 43, 2. pp 193-214.

Hübschle, A, M. 2016. The social economy of rhino poaching: of economic freedom fighters, professional hunters and marginalized local people. *Current Sociology*. 65, 3. pp 427- 447.

Humphreys, J. and Smith, M.L.R. 2011. War and wildlife: the Clausewitz connection. *International Affairs*, 87,1. pp 121-142.

International Union for Conservation of Nature (IUCN). 2000. *Indigenous and Traditional Peoples and Protected Areas: Principles, guidelines and case studies*. [Online] available at: http://www.uicnmed.org/web2007/CDMURCIA/pdf/espanol/documentosdeinteres/Indig_peopple.pdf (09 June 2017).

Kideghesho, J.R., Røskaft, E. and Kaltenborn, B.P. 2007. Factors influencing conservation attitudes of local people in Western Serengeti, Tanzania. *Biodiversity and Conservation*, 16. pp 2213 -2230.

Knapp, E.J., Peace, N. and Bechtel, L. 2017. Poachers and poverty: Assessing objective and subjective measures of poverty amongst illegal hunters outside Ruaha National Park, Tanzania. *Conservation and Society*, 15, 1. pp 24-32.

Lindsey, P.A., Balme, G., Becker, M., Begg, C., Bento, C., Bocchino, C., Dickman, A., Diggle, R.W., Eves, H., Henschel, P., Lewis, D., Marnewick, K., Matheus, J., McNutt, J.W., McRobb, R., Midlane, N., Milanzi, J., Morley, R., Murphree, M., Opyene, V., Phadima, J., Puchase, G., Rentsch, D., Roche, C., Shaw, J., van der Westhuizen, H., Van Vleit, N., and Zisadza-Gandiwa, P. 2013. The bushmeat trade in African Savannas: Impacts, drivers, and possible solutions. *Biological Conservation*, 160. pp 80-96.

Liska, A.E., and Chamlin, M.B. 1984. Social structure and crime control among macro-social units. *American Journal of Sociology*, 90, 2. pp 383-395.

Lunstrum, E. 2014. Green militarization: Anti-poaching efforts and the spatial contours of Kruger National Park. *Annals of the Association of American Geographers*, 104, 4. pp 816-832.

Mabiso, A., Cungura, B., and Befica, R. 2014. Food (In)security and its drivers: insight from trends and opportunities in rural Mozambique. *Food Security*, 6. pp 649-670.

Madzudzo, E. 1997. *Communal tenure, motivational dynamics and sustainable wildlife management in Zimbabwe*. Centre for Applied Social Sciences, University of Zimbabwe, pp 147-185.

Marijnen, E., and Verweijen, J. 2016. Selling green militarization: The discursive (re)production of militarized conservation in the Virunga National Park, Democratic Republic of the Congo. *Geoforum*, 75. pp 274-285.

Massè, F., and Lunstrum, E. 2016. Accumulation by securitization: Commercial poaching, neoliberal conservation, and the creation of new wildlife frontiers. *Geoforum*, 69. pp 227-237.

Marx, K. 1847. The poverty of philosophy: Wage labour and capital, the original 1891 pamphlet. Progress Publishers. Paris. [Online] Available at:

<https://www.marxists.org/archive/marx/works/1847/wage-labour/> (15 February 2018).

Mbaiwa, J.E., and Stronza, A.L. 2011. Changes in resident attitudes towards tourism development and conservation in the Okavango Delta, Botswana. *Journal of Environmental Management*, 92. pp 1950-1959.

Mcneely, J.A. 1993. Economic incentives for conserving biodiversity: Lessons for Africa. *Ecology, Economics, Policy*, 22. pp.144-150.

Millar, J., and Glendinning, C. 1989. Gender and poverty. *Journal of Social Policy*, 18, 3. pp 363-381.

Mir, Z, R., Noor, A., Habib, B., and Veeraswami, G, G. 2015. Attitudes of local people toward wildlife conservation: a case study from the Kashmir Valley. *Mountain Research and Development*. 35, 4. pp 392-400.

Munthali, S.M. 2007. Transfrontier conservation areas: Integrating biodiversity and poverty alleviation in Southern Africa. *Natural Resources Forum*, 31. pp 51-60.

Nelson, F. 2010. Community rights, conservation and contested land. Earthscan: London.

Nelson, F., and Agrawal, A. 2008. Patronage or participation? Community-based natural resource management reform in Sub-Saharan Africa. *Development and Change*, 39, 4. pp 557-585.

Paavola, J. 2004. Protected areas governance and justice: Theory and the European Union's habitats directive, *Environmental Sciences*, 1, 1. pp 59-77.

Pantazis, C. 2000. 'Fear of crime', Vulnerability and poverty: Evidence from British crime survey. *The British Journal of Criminology*, 40, 3. pp. 414-436.

Porter, A., Bohl, D., Kwasi, S., Donnenfeld, Z., and Cilliers, J. 2017. *Prospects and challenges: Mozambique's growth and human development outlook to 2040*. [Online] available at: <https://issafrica.s3.amazonaws.com> (18 September 2017).

Reiss, A.J. 1986. *Crime and Justice*. University of Chicago Press: Chicago.

Ringen, S. 1988. Direct and indirect measures of poverty. *Journal of Social Policy*, pp 351-365.

Ripple, W.J., Chapron, G., López-Bao, J.V., Durant, S., Macdonald, D.W., Lindsey, P.A., Bennett, E.L., Beschta, R.L., Bruskotter, J.T., Campos-Arceiz, A., Corlett, R.T., Darimont, C.T., Dickman, A.J., Dirzo, R., Dublin, H.T., Estes, J.A., Everatt, K.T., Galetti, M., Goswami, V.R., Hayward, M.W., Hedges, S., Hoffmann, M., Hunter, L.T.B., Kerley, G.I.H., Letnic, M., Levi, T., Maisels, F., Morrison, Nelson, J.C.M.P., Newsome, T.M., Painter, L., Pringle, R.M., Sandom, C.J., Terborgh, J., Treves, A., Van Valkenburgh, B., Vucetich, J.A., Wirsing, A.J., Wallach, A.D., Wolf, C., Woodroffe, R., Young, H., and Zhang, L. 2016. Saving the world's terrestrial megafauna. *BioScience Advance Access*, pp 1-6.

Rotshuizen, S., and Smith, M.L.R. 2013. Of warriors, poachers and peacekeepers: Protecting wildlife after conflict. *Cooperation and Conflict*, 48, 4. pp 502-521.

Rowcliffe, M.J., de Merode, E., and Cowlishaw, G. 2004. Do wildlife laws work? Species protection and the application of a prey choice model to poaching decisions. *Royal Society*, 271, 1557. pp 2631-2636.

Scott, R. L., Van Aarde, R.J., and Pimm, S.L. 2008. Fences and artificial water affect African savannah elephant movement patterns. *Biological Conservation*, 142,12. pp 3086-3098.

Sebele, L. 2010. Community-based tourism ventures, benefits and challenges: Khama Rhino Sanctuary Trust, Central District, Botswana. *Tourism Management*, 31. pp 136-146.

Sen, A. 1990. Gender and cooperative conflict. In Tinker, I., Ed., *Persistent inequality*. Oxford: University Press Oxford. pp 123-148.

Silva, J.A. 2007. Trade and income inequality in a less developed country: The case of Mozambique. *Economic Geography*, 83, 2. pp 111-136.

Sims, K.R.E. 2010. Conservation and development: Evidence from Thai protected areas. *Journal of Environmental Economics and Management*, 60. pp 94-114.

Soto, B., Munthali, S.M., and Breen, C. 2001. Perceptions of the forestry and wildlife policy by the local communities living in the Maputo Elephant Reserve, Mozambique. *Biodiversity and Conservation*, 10. pp 1723-1738.

South, N., and Wyatt, T. 2010. Comparing illicit trades in wildlife and drugs: An exploratory study. *Deviant Behaviour*, 32, 6. pp 538-561.

Steinmetz, R., Srirattanaporn, S., Mor-Tip, J., and Seuaturien, N. 2014. Can community outreach alleviate poaching pressure and recover wildlife in South-East Asia protected areas? *Journal of applied ecology*, 51. pp 1469 -1478.

Townsend, P. 1979. *Poverty in the United Kingdom: A survey of household resources and standards of living*. University of California Press: Los Angeles.

Van Der Merwe, M. 2016. Outpacing global GDP growth: Environmental crime. *Daily Maverick*. [Online] Available at: <https://www.dailymaverick.co.za> (29 May 2017).

Vand. J., and Transnat'l L. 1657. 2003. The black market for wildlife: Combating transnational organized crime in the illegal wildlife trade. *Vanderbilt Journal of Transnational Law*, pp 1657-1665.

Walljasper, J. 2013. Stealing the common from the goose. [Online] Available at: <http://www.onthecommons.org> (28 February 2018).

Warchol, G.L. 2004. The transnational illegal wildlife trade. *Criminal Justice Studies: A Critical Journal of Crime, Law and Society*, 17, 1. pp 57-73.

Wasser, S.K., Clark, W.J., Drori, O., Kisamo, E.S., Mailand, C., Mutayoba, B., and Stephens, M. 2008. Combating the illegal trade in African elephant ivory with DNA forensics. *Conservation Biology*, 22, 4. pp 1065-1071.

West, P., Igoe, J., and Brockington, D. 2006. Parks and peoples: The social impact of protected areas. *Review of Anthropology*, 35. pp 251-277.

White, N. 2013. The “White Gold of Jihad”: violence, legitimisation and contestation in anti-poaching strategies. *Journal of Political Ecology*, 21, 1. pp 452- 474.

APPENDIX 1: Consent to conduct survey in Mangalane Community

Dear Miss Nefasiwe Vundla

RE: REQUEST FOR PERMISSION TO CONDUCT RESEARCH AT MANGALANE COMMUNITY

I, Chief of Mangalane community, hereby grant consent to Miss Nefasiwe Vundla to conduct 60 surveys of 10 people per village and focus groups of 10 people per village at Mangalane for the research topic titled "Mangalane Community's Perceptions of Socio-Economic Factors Influencing Involvement in Illegal Wildlife Trade: A Case Study Of Mangalane Community, Mozambique".

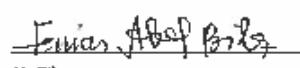
On behalf of Mangalane community, I hereby request a copy of the thesis once completed.

Yours sincerely,



Chief Mangalane
Mangalane Community, Mozambique

Yours Sincerely



Mr Bila
Sabié District Chefe Da Posto, Mozambique

APPENDIX 2: Survey English

MANGALANE COMMUNITY'S PERCEPTIONS OF SOCIO-ECONOMIC FACTORS INFLUENCING INVOLVEMENT IN ILLEGAL WILDLIFE TRADE: A Case study of Mozambique							
Section 1: Identification details		Statement about informed consent					
Q1 Survey number		1. This survey should take one hour					
Q2 Name of community		2. You don't have to answer any question you do not want to					
Q3 Name of village		3. Your name will not be connected with your answers					
Q4 Name of enumerator		4. All information I confidential					
Q5 Date of interview		5. You can stop the interview process at any time					
		6. You can ask for clarification on any question at any time					
Having wildlife is a good idea	4j	😊😊	😊	😊	😊	😊😊	Having wildlife is not a good idea
I like all the animals as long as they stay behind the fence	4c	😊😊	😊	😊	😊	😊😊	I don't like all the animals even if they are behind the fence
I like all the animals in the game reserve	4a	😊😊	😊	😊	😊	😊😊	I do not like all the animals in the game reserve
I like that the park tells us when to go in and when not to go in	5b	😊😊	😊	😊	😊	😊😊	I do not like that the park tells us when to go in and when not to go in
I like the animals only if they pay us for the damage	4d	😊😊	😊	😊	😊	😊😊	I like the animals even if they do not pay us for the damage
I like the fence around the Park	5k	😊😊	😊	😊	😊	😊😊	I do not like fence around the Park
I like the leaders of the park	5f	😊😊	😊	😊	😊	😊😊	I do not like the leaders of the park
I like the park because they give us meat and money	5e	😊😊	😊	😊	😊	😊😊	I don't like the park because they do not give us meat and money
I like the park because they help us	5c	😊😊	😊	😊	😊	😊😊	I don't like the park because they do not help us
I like the park even if they are on our land	5d	😊😊	😊	😊	😊	😊😊	I don't like the park on our land
I like the rules made by the park	5a	😊😊	😊	😊	😊	😊😊	I do not like the rules made by the park
I sell all the meat from animals I hunt	4g	😊😊	😊	😊	😊	😊😊	I do not sell all the meat from the animals I hunt
I support the work of the rangers in the park	6b	😊😊	😊	😊	😊	😊😊	I do not support the work of the rangers in the park
I would like wildlife more if I could make more money from it	4e	😊😊	😊	😊	😊	😊😊	I wouldn't like wildlife even if make more money from it
I would like wildlife more if I could own it like cattle	4f	😊😊	😊	😊	😊	😊😊	I would not like wildlife even if I owned it
It is our responsibility to stop poachers	2h	😊😊	😊	😊	😊	😊😊	It is not our responsibility to stop poachers
Leaders of the park care about us	5g	😊😊	😊	😊	😊	😊😊	Leaders of the park do not care about us
Money given to park rangers can help to buy food for the community	6f	😊😊	😊	😊	😊	😊😊	Money given to rangers does not have to buy food for the community
Only people with less money go hunting	2e	😊😊	😊	😊	😊	😊😊	Not only people with less money go hunting
Our relationship with the Park is good	5L	😊😊	😊	😊	😊	😊😊	Our relationship with the Park is not good
Park rangers treat us like good people	6d	😊😊	😊	😊	😊	😊😊	Rangers treat us like bad people
People hunt rhinos to make more money	2f	😊😊	😊	😊	😊	😊😊	People do not hunt rhinos to make money
People hunt to feed their families	2a	😊😊	😊	😊	😊	😊😊	People do not hunt to feed their families
People hunt when they run out of food	2b	😊😊	😊	😊	😊	😊😊	People do not hunt when they run out of food
People hunt when they run out of money	2c	😊😊	😊	😊	😊	😊😊	People do not hunt when they run out money
People hunted more during the recent drought	2d	😊😊	😊	😊	😊	😊😊	People did not hunt more during the recent drought
People poach because they are hungry	2g	😊😊	😊	😊	😊	😊😊	People do not poach because they are hungry
People poach less than before	3j	😊😊	😊	😊	😊	😊😊	People poach more than before
Poachers are good for our future	3d	😊😊	😊	😊	😊	😊😊	Poachers are not good for our future
Poachers are good people	3a	😊😊	😊	😊	😊	😊😊	Poachers are not good people
Poachers are very helpful around the community	3g	😊😊	😊	😊	😊	😊😊	Poachers are not helpful in the community
Poachers help the community when they are sick	3f	😊😊	😊	😊	😊	😊😊	Poachers do not help the community when they are sick
Poachers help us get food	3e	😊😊	😊	😊	😊	😊😊	Poachers do not help us get food
Poachers help us in the community	3b	😊😊	😊	😊	😊	😊😊	Poachers do not help us in the community
Poachers share some of their money with us	3c	😊😊	😊	😊	😊	😊😊	Poachers do not share their money with us
Poaching is a good thing	2i	😊😊	😊	😊	😊	😊😊	Poaching is not a good thing
Poaching is a good thing	3k	😊😊	😊	😊	😊	😊😊	Poaching is not a good thing
Rangers are good to the people of the community	6c	😊😊	😊	😊	😊	😊😊	Park rangers are not good to the people of the community
Rangers must be part of our community	6h	😊😊	😊	😊	😊	😊😊	Rangers must not be part of our community
Rhino poaching is a good thing	5m	😊😊	😊	😊	😊	😊😊	Rhino poaching is not a good thing
Some animals must be taken out of the game reserve	4b	😊😊	😊	😊	😊	😊😊	There is no need to take animals out of the game reserve
The benefits of wildlife are more than the cost	4h	😊😊	😊	😊	😊	😊😊	The cost of wildlife are more than the benefits
The Park does a lot for us	5j	😊😊	😊	😊	😊	😊😊	The Park does not do anything for us
The Park is very important to us	5i	😊😊	😊	😊	😊	😊😊	The Park is not important to us
The park needs to add more rangers	6e	😊😊	😊	😊	😊	😊😊	The park does not need to add more rangers in the park
The rangers in the park protect us	6a	😊😊	😊	😊	😊	😊😊	The rangers in the park do not protect us
The rules in the park are good for us	5h	😊😊	😊	g	g	😊😊	Rules in the park are not good for us
We need more space for wildlife	4i	😊😊	😊	😊	😊	😊😊	We do not need more space for wildlife