

**LOCAL PEOPLE PERCEIVED BENEFITS AND COSTS OF TRANS-FRONTIER
CONSERVATION AREAS: THE CASE OF LIKUYUSEKAMAGANGA VILLAGE IN
SELOUS-NIASSA TRANS-FRONTIER CONSERVATION AREA**



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MSc. Thesis: GEO-80436 (2011 – 2013)

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July 2013

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Disclaimer

This document has findings on the thesis study entitled “*local people perceived benefits and costs of Trans Frontier Conservation Areas*” the case of Likuyusekamaganga village in the Selous-Niassa Trans-frontier Conservation Area. I hereby affirm that this is my original work and it is not an official publication of the Wageningen University rather a requirement attaining a Master’s of Science degree in Leisure, Tourism, and Environment. The content herein does not in any case represent views from the University.

Acknowledgement

I acknowledge the support from the World Bank (STHEP) scholarship through the Sokoine University of Agriculture, Morogoro – Tanzania for financing my studies at Wageningen University (2011-2013). Many thanks to all staff from The Sokoine University of Agriculture who facilitated the processes of my study in The Netherlands.

I owe many thanks to my supervisor Prof. V. R. (René) van der Duim for his time, patience, reliability, and readiness to assist throughout the processes of writing this thesis. Many thanks to the staff of Wageningen University, Cultural Geography Chair Group for nurturing my research skills making it possible for me to undertake this study. I also extend my heartfelt thanks to Dr. Martijn Duineveld for accepting to be my Examiner and at large his contribution in framing my study findings.

Special thanks to the management of the Ministry of Natural Resources and Tourism Tanzania for allowing the research to take place in Namtumbo District. Special regards to the management of the Mbarang'andu Wildlife Management Area and to the people and all investors and tourism related NGOs working in Namtumbo District who dedicated their time and resources to make this research possible. I also take this opportunity to send my regards to the SNWCP management for constant supply of information when I needed it. The Game Unit of Namtumbo District support is highly acknowledged.

I owe my gratitude to all who made this study possible.

Unless we find ways to meet conservationist goals without harming the interests of local people, conservation cannot succeed (Neumann, 1992)

Summary

Trans-frontier Conservation Areas are relatively large areas, straddling frontiers between two or more countries and cover large-scale natural systems encompassing one or more protected areas. Trans-frontier Conservation Areas formations are specifically meant to serve ecological, socio-economical and governance objectives. This study choose and addresses socio-economical objective of Trans-frontier Conservation Areas by examining local people perceived benefits and costs as a result of their living on the edges of the wildlife corridor that forms the Selous-Niassa Trans-frontier Conservation Area. The Selous-Niassa Trans-frontier Conservation Area lies along the borders of Tanzania and Mozambique in Eastern Southern Africa. This study embraces the political ecology framework with reference to three chosen aspects to include access and use of resources, participation, and decision-making and distribution of conservation benefits and costs to establish the perceived benefits and costs of local people in Likuyusekamaganga village. The study executed semi-structured interviews, focus group discussions, observations and secondary data review to establish local people perceived benefits and costs as a result of their living on the edges of the wildlife corridor that forms the Trans Frontier Conservation Area.

The study establishes that, access and resource use issues in the wildlife corridor are determined by the international non-governmental conservation organisations in collaboration with the State, the situation that has led to conservation disputes between local people on one side and international non-governmental conservation organisations aligned with the State on the other side. The study established that issues related to access and use of resources in the wildlife corridor accompanied with lack of full participation of local people in decision making regarding resource use and denial of access to the land that is now part of the wildlife corridor has led to conservation disputes where on one side local people see the corridor as a fertile land where agriculture practice would yield more substantial benefits as opposed to the State and international non-governmental conservation organisations that aim at conserving the corridor. Conservation disputes between conservation and uranium mining were also established. The study elaborates on how campaigns against uranium mining by international non-governmental conservation organisations and human rights organisations at the national level went against the State unsuccessfully.

Now the Mbarang'andu WMA area of about 200km² is now used for uranium mining. The study also establishes ambiguities in participation and the wildlife management area management and international non-governmental conservation organisations in collaboration with the State have bypassed decision-making processes from the findings that local people claimed to when it comes to decision making regarding resource access and use. The study also found that benefits like the village tractor, the office buildings, training of village game scouts to mention a few are criticised by local people from the claim that they benefit only few people and they cannot be claimed to have benefited all people in the village. The wildlife corridors' costs to local people to include like restrictions from accessing the corridors' land for agriculture are also distinguished in this study.

The study summarises that, the establishment of Trans Frontier Conservation Area is a discourse that considers community as homogeneous and a claim that Trans Frontier Conservation Areas formation as a conservation strategy addresses the socio-economic interests of local people in promises like poverty reduction and improvement of livelihood by provision and sharing of benefits of conservation by the State, non-governmental conservation organisation and whoever else included in management of such areas needs to be critically addressed. Struggles for resource use and access for example between local people at Likuyusekaganga village who values and wants to go back in the wildlife corridor for traditional activities like agriculture is against the conservation motive of the corridor and this make the corridor vulnerable to threats like encroachment by local people for the reason that they have not so far seen the benefits of conservation the corridor. From the findings of this study, so far benefits to normal local people as a result of their living on the corridor that forms the Selous-Niassa Trans Frontier Conservation Area is materially abstract and that it needs to critically be addressed if the objective of establishing and managing the Trans Frontier Conservation Areas by involving local communities is to be achieved.

Key words: Trans Frontier Conservation Area, Local People, Benefits, and Costs of Conservation

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List of Abbreviations

AA	Authorised Association
ADAP	Association for Development of Protected Areas
CBCTC	Community Based Conservation Training Centre
CBNRM	Community Based Natural Resources Management
CBO	Community Based Organisation
CGWC	Council for Game and Wildlife Conservation
GTZ-IS	The Deutsche Gesellschaft fuer Technische Zusammenarbeit - International Services
KfW	Kreditanstalt für Wiederaufbau (German government-owned development bank)
MoU	Memorandum of Understanding
NGOs	Non- governmental Organisations
SGR	Selous Game Reserve
SNTFCA	Selous – Niassa Trans-frontier Conservation Area
SNWPC	Selous -Niassa Wildlife Protection Corridor
TFCAs	Trans-frontier Conservation Area
UNDP	United Nations Development Programme
URT	United Republic of Tanzania
WMAs	Wildlife Management Areas
WWF	World Wide Fund for Nature

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1. INTRODUCTION AND BACKGROUND TO THE STUDY

1.1 The Selous – Niassa Trans Frontier Conservation Area

The Selous Game Reserve is approximately 48,000km² and represents about 6% of Tanzania's land surface. The size makes the reserve the largest single protected area in Africa. The reserve has a large concentration of elephants, buffaloes, antelopes, wild dogs, lions, and other types of ecosystems. The Selous Game Reserve adjoins to Niassa Game Reserve of Mozambique forming the Selous – Niassa Trans-frontier Conservation Area (SNTFCA), which is the largest trans-boundary ecosystem in Africa covering about 150,000 km² extending from Southern Tanzania to Niassa Game Reserve in Northern Mozambique. The Niassa Game Reserve in Mozambique is the largest conservation area in the country covering 42,000 km², with the largest concentration of wildlife in Mozambique (HAHN 2004).

In late 2004, the District Authorities in Selous Game Reserve and GTZ conducted a joint planning study for tourism development, wildlife-based industries, and participatory forest management along the Ruvuma River interface, the river that borders Tanzania and Mozambique. The government of Tanzania initiated the conservation of the corridor in 2005 with the support from the Global Environmental Facility and the United Nations Development Programme (UNDP). In addition, it is also in the year 2004 when, the Federal Republic of Germany made available substantial funds to support the development of the Selous –Niassa Trans-frontier Conservation area and funds through the German Development Bank. Through that, the villages were encouraged to establish a network of wildlife management areas (WMAs) which intended to link and protect the wildlife corridor linking the Selous and Niassa Game Reserves to form the Selous – Niassa Trans-frontier Conservation Area (SNTFCA). The wildlife corridor that joins the two game reserves is known as USHOROBA¹. The Wildlife Policy of Tanzania (1998) introduced a category of protected areas to form of WMA for the purposes of effecting community-based conservation.

¹ USHOROBA is a Swahili word that means a wildlife corridor.

WMAs formation are encouraged as they are expected to ensure that wildlife conservation competes with other forms of land use through realisation of the benefits of foregoing large prices of land for wildlife conservation in favour of other uses like agriculture and pastoralism. Ramutsindela and Noe (2012) explains that the creation of WMAs aimed at releasing the communal land for nature conservation, including conservation outside formally protected areas which is a prerequisite for realizing plans for Trans Frontier Conservation Areas (TFCAs) formation. The Selous - Niassa Wildlife Corridor holds the establishment of a network of wildlife management areas (WMAs) that are utilised by local communities with the assistance of the Local Government and the Ministry of Natural Resources and Tourism. 1998) explains that the idea behind local people utilisation of the WMAs resources follows a conception that local people being the legitimate owners' stands to benefit from the conservation activities in WMAs through attracting investment in activities like tourism hunting.

This study aims at examining the perceived costs and benefits of local people following their living on the edges of the SNTFCA. The focus is on local people for the reasons that they are the ones who live on the edges of the wildlife corridor thus a likelihood that they are susceptible to conservation pressures like denial of access to the resources they were used to before establishment of the conservation area. In addition, local people are a focus of this study because they are the ones who released their village lands for the purposes of establishing the wildlife corridor that links Selous and Niassa Game Reserves to form the SNTFCA. The idea that villagers released their land to form the WMAs is substantiated by Noe (2010) who explains that it is the network of the WMAs that formed the wildlife corridor referred to in this study. With the main aim of examining local people perceived costs and benefits as a result because of their involvement in Trans-frontier Conservation Areas (TFCAs) formation and management, the study finds it important to understand the processes of formation of the TFCAs. Trans-frontier Conservation Areas (TFCAs) are relatively large areas, on both sides of borders between two or more countries and cover large-scale natural systems encompassing one or more protected areas. TFCAs involve a unique level of international co-operation between the participating countries, particularly issues related to the opening of international boundaries and within each region.

TFCAs formations are specifically meant to serve ecological, socio-economical and governance objectives Goldman (2003).

TFCAs formations are guided by three main objectives i.e. ecological, socio-economical and governance (<http://www.retosa.co.za/regional-initiatives/trans-frontier-conservation-area>). Ecologically, TFCAs aim to re-establish key ecological functions previously disrupted by limitations of opposing land uses and management principles across the borders; re-establish seasonal migration routes for wildlife; and support resources management by promoting basin-wide approaches to the management of international rivers and wetlands. Socio-economically TFCAs are meant to promote growth of the tourism sector specifically cross-border tourism; increase the economies of scale for economic activities such as eco-tourism, and natural resource based enterprises and promote cultural linkages between countries in the region and people across borders by kinship, language, and culture and in terms of governance, TFCAs strengthen regional integration and cooperation.

The processes of TFCAs formation involves multiple of organisations both governmental and non-governmental from their establishment to their management the processes which I refer to as the manifestation of neoliberalism in the conservation of natural resources where NGOs exert and exercise a significant power in their establishment and management. Duffield (2007) argues that frontiers in Africa have also irrevocably moved from national developmentalism to neoliberal conditionality where donor governments, international financial institutions, United Nation agencies, and Non-Governmental Organisations exercise significant control over the design and delivery of economic and welfare functions of the state. Duffield (2007) continues that one of the consequences of the growing importance of neoliberal approaches to conservation is the growing involvement of the private sector in the tenure and management of protected areas, raising complex issues of rights, ownership, governance and legitimacy. Adams and Hutton (2007) affirms that, there is increasing number of examples of conservation NGOs and wealthy individuals purchasing or leasing land and resource rights from governments, for example leasing logging concessions for sustainable conservation enterprise development. Duffield (2007) also substantiates that the significant control by NGOs goes further and determines the borders and all activities of conservation of the proposed areas for conservation.

Duffield (2007) also claim that, within the underdeveloped world, many forms of primitive accumulation that would be recognizable to Marx are still operating today. He mentions some of the forms to include; the dispossession of peasantries, the displacement of family by international agribusiness, forced migration, the wholesale privatization of common property such as water, the suppression of indigenous forms of production and consumption and so on. A previous study by Noe (2010) on WMAs formation and their contribution on the formation of the SNTFCA explains the existence of alterations like villagers being restricted and relocated from the areas involved in the corridor forming the SNTFCA. Noe (2010) further explains that villagers were instructed to keep the core areas free from human activities to include restraining from crop cultivation and forest products collection. It is from this juncture where the study precedes with the presumption that there must have been promises of benefitting that made local people to release their land for SNTFCA formation, the point that sets a platform for this study to establish local people perceived costs and benefits because of their living on the edges of the SNTFCA.

1.2 Problem Statement

The processes of establishing and managing TFCAs comes along with a variety of actors and most of the time these actors have different interests (Noe 2010). The differing interests tend to render the role of local people silent as argued by Andersson *et al.*, (2012) and that promises to local people that they would benefit as part of their involvement in the TFCAs are not necessarily delivered (Buscher 2009). Buscher (2009) explains that TFCAs formation encompass many actors; cover large spaces and unleash contradictions and struggles and that like any other hegemonic ideology, borders formation are both reinforced and resisted in multiple ways both from inside and the outside and both consciously and unconsciously. Buscher (2009) informs that, negotiations in formation of TFCA require among others factors that local people relocate the processes, which are accompanied by promises that are not necessarily being delivered. From Buscher (2009) expected benefits by local people when releasing their land for TFCAs establishments may include: facilitation of local people participation in decision making regarding natural resources management issues, enhancing local people ownership, empower communities, enhance international cooperation and understanding, re-unite and reinvigorate cultures, stimulate spirituality, encourage economic

growth and tourism, educate, form partnerships, bring peace, enhance security, adhere to good governance etc. This study understands that, the establishment of TFCAs as a conservation strategy is expected to benefit local people, contribute to their socio-economic improvement from an understanding that local people are the legitimate owners of the land, resources meant for conservation, and that they would be considered, and stand to benefit from the conservation and management after TFCAs formation.

Andersson *et al* (2012) argues that TFCAs boundaries as human created boundaries in landscapes are mainly a result of competing claims for resources and changing power relations among the actors and interest groups involved including the state agencies. Andersson *et al* (2012) verifies that opportunities for people living on the edge are influenced by multitude of factors from the global to local level but that it requires local gravitation in order for people on the edges of TFCAs to meaningful participate in their own future on the protected areas edges. Andersson *et al* (2012) also argues that, often the costs of living on the edges offset the benefits of human - wildlife relation in a sense that the establishment of wildlife corridors and protected areas is the most tangible plan pursued within the context of TFCA formation. This is for the reasons that both ecological and conservationist perspectives are generally silent on the role and position of local people in enlarged conservation areas; and that they tend to render them invisible. Furthermore, Andersson *et al* (2012) argues that ignoring people living in TFCAs, of course, serve the political and economic interests of those advocating these conservation areas. Previous studies issues a caution on the costs and benefits of TFCAs formation on local people. For example, Noe (2010) explains that the formation of TFCA among others factors subject local people to relocation, where Buscher (2009) caution that the processes of TFCAs formation are accompanied with promises that are not necessarily delivered. Andersson *et al.*, (2012) caution that often, the costs of local people living on the edges offset the benefits. This study considers and takes the claims by Noe (2012); Bucher (2009) and Andersson *et al.*, (2012) as a platform to establish local people perceived benefits and costs of the people in Likuyusekamaganga village as a result of their living on the edges of the SNTFCA. I take the claims as a platform because I want to establish that if local people relocated to form WMAs under promises that they would in turn benefit then to what extent has the wildlife corridor formation has turned to be either benefits or costs.

The study establishes local perceived benefits and costs by studying actors present in managing the wildlife corridor and more specifically the extent to which their presence and interests affects distribution of benefits and costs to local people.

1.3 Research Objectives

The main objective of the study was to examine local people perceived costs and benefits as a result of their living on the edges of the wildlife corridor that forms the Selous - Niassa Trans Frontier Conservation Area. The research was guided by the following specific objectives:

- i. To identify actors and their interests on the management of the wildlife corridor that forms the SNFCA.
- ii. To examine present actors interests and the extent to which the identified interests affect issues related the wildlife corridors' resource access and use, participation and decision making with regard to resource access and use and benefits and costs distribution.
- iii. To examine the mechanisms used by present actors in managing the wildlife corridor the ways into which the mechanisms in-use affect issues related the wildlife corridor resource access and use, participation and decision making with regard to resource access and use and benefits and costs distribution.

1.3.1 Research Questions

- i. Who are actors involved in the formation of SNTFCA?
- ii. What are the interests behind actors' involvement in the formation and management of SNTFCA and to what extent do the interests affect issues related to: access and use of resources in the corridor; participation & decision making regarding resource use in the corridor and distribution of costs & benefits because of the establishment and management of the wildlife corridor.

- iii. What are the mechanisms used by actors in managing the SNTFCA and to what extent does the interests affect issues related to: access and use of resources in the corridor; participation & decision making regarding resource use in the corridor and distribution of costs & benefits because of the establishment and management of the wildlife corridor.

1.4 Implications of the study in relation to issues concerning involvement of local people in formation and management of TFCAs

The study about establishing local people perceived benefits and costs as a result of their living on the edges of the wildlife corridor that forms the SNTFCA will have contributions in the field of Trans Frontier formation as a conservation strategy and at large local people involvement in natural resources conservation strategies in the following ways;

Scientifically, the study on perceived costs and benefits of local people living on the edges of the SNTFCA will contribute to the debates about local people involvement in TFCAs formation and management by establishing empirical evidences from the SNTFCA. The evidences established will and may be used as a platform to see what has so far succeeded or failed and the reasons behind the situation. In addition, this study makes a contribution in form of empirical evidence as a continuation of the study by (Noe 2010) on how the TFCA process re-organizes space and creates new types of borders with a purpose of explaining the impacts of the creation of new borders to local people after they release their land to form the wildlife corridor.

This study will also contribute to national and societal discussions concerning local people and their involvement in managing conservation areas in Tanzania. In one way, the study findings will be a platform to measure the extent to which local people in SNTFCA are satisfied or dissatisfied with the contemporary situation in the corridor in comparison to other experiences from Tanzania. Other experiences from Tanzania with regard to conservation areas include: experiences that local people were evicted from their lands to leave a space for conservation that led to conflicts between local people and conservation organisations, dispossession of local people land by using the conservation discourse as a weapon

(Neumann 1992; Neumann 1997; Nelson and Makko 2005; Wilfred 2010 and Benjaminsen & Bryceson, 2012). In addition, there have been debates about local people marginalisation in conservation activities where it is established, that it is mainly local people leaders, the government, and management of conservation NGOs that decides for local people. The study findings may be used to see what has changed in such debates from the perspective of empirical evidences that can be compared with the experiences of resource conflicts and local people alienation from their lands as claimed by Neumann (1992); Neumann (1997); Nelson and Makko (2005); Wilfred (2010) and Benjaminsen & Bryceson (2012).

1.5 Structure of the Thesis

In this thesis, Chapter 1 introduces issues related to establishment of the Selous – Niassa Trans Frontier Conservation Area. This chapter also introduce issues related to the role of WMAs in SNTFCA, the study objective and research questions. The chapter ends by explaining the implications of the study. Chapter 2 explains the political ecology framework as used in this study. This chapter shades a light on the meaning of the political ecology framework, and experiences of its application in Tanzania. This chapter also, explains 3 political ecology issues in relation to access of resources in the wildlife corridor, issues related to local people participation and decision making regarding resources in the corridor and costs and benefits distribution in relation to local people involvement in TFCAs establishment and management. In the same order, Chapter 3 establishes how the study was executed, methods of data collections used, and analysis of data collected. The chapter also highlights issues related to quality and limitations of the study, practical problems encountered during the study, issues related to validity and reliability of the study and the chapter ends by explaining the reflection and positionality of the researcher in relation to the study

Chapter 4 comes with a review on issues related to management of natural resources in Tanzania with an emphasis on WMAs and their role in forming the SNTFCA. The chapter also gives experiences of involvement of local people on the management of natural resources and the challenges, and the chapter highlights the importance of inclusion of local people in establishing and managing TFCAs. This chapter also enlightens the study by reviewing experiences by reflecting on TFCAs formation objectives in Sub Saharan Africa. Chapter 5 brings empirical findings about local people perceived benefits and costs of TFCAs by giving the experiences of local people from Likuyusekamaganga village in the SNTFCA. The findings are discussed in relation to existing body of knowledge and literature in relation issues of access and resource use, participation and decision-making and distribution of benefits and costs. The discussions in this chapter involve showing the similarities and contrast of the findings with previous studies. Chapter 6 gives an overview of the study, discussions, and conclusions. This chapter also gives a reflection on the usefulness and critiques of the political ecology framework as used in this study. The chapter ends by explaining lessons learned and recommendations.

2. THE POLITICAL ECOLOGY THEORETICAL FRAMEWORK

2.1 Meaning and background of the political ecology framework

According to Walker (2005) early writings in political ecology focused on unequal power relations, conflict and cultural ‘modernization’ under a global capitalist political economy as key forces in reshaping and destabilizing human interactions with the physical environment where for example Blaikie and Brookfield (1987) refer and explain the phrase “political ecology” as the framework that combines the concerns of ecology and a broadly defined political economy. Blaikie and Brookfield (1987) identified key analytical approaches in political ecology, including a focus on the ways the that environmental actions of the land manager (usually understood as rural land users in the third world) are shaped by economic, ecological and political marginalization, pressure of production on resources and flawed environmental data and policies. They also argued that the increased integration of third-world land users into global markets under unequal relations of power undermines the localized environmental knowledge and subjects the long histories of successful adaptation to sometimes harsh and unpredictable environments through the creation of situational rationality that could potentially force land users to degrade their environments in acts of desperate ecocide

Another point of departure in attempts to understand the what is the political ecology framework is raised by Bryant (1992) who holds that, political ecology framework represents an attempt to develop an integrated understanding of how environmental and political forces interact to mediate social and environmental change. According to Bailey and Bryant (1997) political ecology framework defines the environment as an arena where different social actors with asymmetrical political power are competing for access to and control of natural resources. The idea of asymmetrical power relations which is referred to as unequal power relations by Bryant (1997) is central to political ecology framework. He continues that, at the heart of a political ecology is the idea that the relationship between actors (i.e. states, businesses, non-governmental organisations, farmers etc.), and the links between actors and the physical environment, are conditioned by power relations and that those relations are highly unequal in so far as different actors bring to bear different power capabilities in

struggles over access to environmental resources in the third world. Power is thus for political ecologists a key concept in efforts to specify the topography of a politicised environment.

Bryant (1998), explains to better understand and apply the framework it is important to recognise its areas of inquiry to include the contextual sources of environmental change; conflict over access to resources; and the political ramifications of environmental change. He continues that, political ecology recognises the influence of the broader context (i.e. at state, interstate and global levels), and also the evolving nature of the situation, where environmental changes, both inside and outside the location, have profound and direct implications for patterns of resource use by the various users. Watts (2000) elaborates that political ecology helps to examine effects of the scaled places regarding issues related to access and control of resources on the spatially defined in conservation units like national parks, world heritage sites, wildlife corridors and biosphere reserves. In this study, the political ecology framework intends to reveal local people perceived costs and benefits focusing on issues related to access and use of resources in the corridor and the extent to which local people participate and have a say in decision-making processes and the distribution of benefits and costs.

The rationale for political ecology use and its application in this study is that probably conflicts of resource management arise when costs of local people involvement in managing the resources in the wildlife corridor offsets benefits, also probably conflicts do arise when local people feel to have less power in decision-making processes and in all issues regarding benefits and costs distribution.

2.1.1 Political ecology in the conservation industry: selected descriptions

Bailey and Bryant (1997) explain that political ecology defines the environment as an arena where different social actors with asymmetrical political power are competing for access to and control of natural resources and that the act of declaring and implementing a conservation policy is a paradigmatic example of this competition for environmental control.

In Tanzania, conservation is done mainly implemented through the establishment of protected areas and in this study; I refer to the wildlife corridor that forms the SNTFCA to be an example of the protected area. Vaccaro, Beltran et al. (2013) argues that protected areas, by definition, establish jurisdictions and borders that define exclusionary rights and that they are implemented by different social and institutional actors (often powerful), suffered by other social groups (often not so powerful), and enjoyed by yet another set of players (tourists and scientists). They continue that, these discrete actors, therefore, remain engaged in an assemblage of contradictory social relationships. Furthermore, Vaccaro, Beltran et al. (2013) argues that these different social actors define nature, legitimacy, rights, or use in very different, and culturally dependent, ways it is not surprising, then, that political ecology, from its very beginnings, devoted analytical attention to the socio-ecological context of conservation policies.

When speaking of political ecology and conservation, one eventually finds variations of ideas, issues, and troubles, especially when looking at conservation through the creation of conservation units, the creation process that is defined by McCarthy (2002) as a wise use's situation in an advanced capitalist nation that immediately reinforces and demarcates areas for conservation using the neoliberal approaches without concern on rural, often agrarian, third world situations. Sutton and Anderson (2009) defines political ecology as the study of the day-to-day conflicts, alliances, and negotiations that ultimately result in some sort of definitive behaviour and also that it is political ecology that enhances to establish how politics behind actors in conservation affects or structures resource use. Sutton & Anderson (2009) asks critical questions in attempt to explain how creation of conservation units may or may not affect local people. They ask for whose benefit and for what reasons are NGOs involved in conservation? They also ask the government's role in conservation. The message from Sutton & Anderson (2009) as related to this study is that when establishing conservation units and in this study the wildlife corridor that forms the SNTFCA it is important that conservation NGOs and the State does not forget local people because they are the ones that are immediately affected by such activities.

In the same line of thinking about conservation, Adams and Hutton (2007) warns that issues related to conservation of natural resources are highly a complex process. They hold that, whether in the work of contemporary scientific conservation planners, identifying and lobbying for the preservation of hotspots, or the work of their colonial forbears, certain ideas of nature are formulated, purified, and harnessed to social action in ways that reveal profound differences in the power of different actors. Ideas of nature are lay on the ground in protected areas, and that the needs, rights, and interests of people are bended to fit the resulting conservation landscape. They stress that all these can be revealed using the political ecology framework. That if carefully analysed conservation of ecology in neoliberal conditions reflects the power of conservation organisations. That it is these organisations, and the scientists, intellectuals and supporters from whom they draw their vision and strength, that lead them to have remarkable power to define and delineate nature, to determine who can engage with it and under what rules, and to divide landscapes into zones that structure rights and access. Adams and Hutton (2007) concludes that protected areas aligned with other major projects imposed by the state in partnership with international organisations has the capacity to deliver significant public goals but also to impose significant local costs.

2.1.2 Political ecology in natural resources conservation in Tanzania: Selected experiences

Neumann (1992) gives a history of conservation in Tanzania in relation to issues of conflicts regarding access and use of resources. He explored the establishment of national parks under British colonial rule and the tightening of state control over access to resources at the expense of customary rights. Neumann (1992) presents examples from the Mt. Meru area of northeastern Tanzania and he says that during the colonial period, the formal political debate over land and resource rights was conducted without the participation of African peasants. After independence, the state continued to assert control over resource access unilaterally. It followed that as Meru peasants had effectively been shut out of the formal political process, their only recourse for defending the loss of access to natural resources was everyday forms of resistance, including de facto alliances with commercial poachers and ‘foot dragging’ in regards to compliance with conservation laws. He further argues that wildlife protection, or any conservation policy, is often a political endeavour, producing winners and losers.

He continues that in Tanzania, wildlife, first through the attraction of hunting and later game viewing and photography, has long been recognized as a source of revenue by the state in form of earnings from entrance fees, bed taxes and such accrue solely to the central treasury but that on the other hand, there is no question that local residents have lost access to a range of material benefits that have yet to be replaced by alternative sources.

Neumann (1997) elaborates that many of the conservation projects in Tanzania replicate more coercive forms of conservation practice and often constitute an expansion of state authority into remote rural areas. He claims that in Tanzania, several buffer zone projects have been proposed or implemented with similar ramifications for local land and resource control where he gives an example of buffer zone project of the Selous Game Reserve, the largest protected area on the continent at 50,000 km². Neumann (1997) affirms that in the 1980s, the Selous Conservation Programme was implemented under the sponsorship GTZ in an attempt to address some of the conflicts between reserve authorities and local communities where in 1988 study produced for GTZ recommended that a buffer zone be established along the perimeter of the game reserve.

According to Neumann (1997), the authors of the study recommended that within the buffer zone, Game Authorities should have the final and that the set aside land should not be considered as part of village land. The government subsequently established a buffer zone encompassing 3630 km² of adjacent forest, grazing pasture, and settlement under the jurisdiction of the reserve authorities. Neumann (1997) continues that similarly, park authorities who would oversee land use managed a proposed buffer zone at Lake Manyara National Park, and on the Serengeti Regional Conservation strategy where boundaries of Serengeti National Park were launched in 1985 by restricting local people to enter the buffer zone for their traditional life making activities. He argues that, in that case, restrictions on adjacent land uses are seen as essential to minimize conflicts across boundaries between the Park and adjacent villages but that was not the case. He concludes that the ultimate resolution for land use conflicts was the removal of land uses that were incompatible with conservation the move that further increased conflicts.

Nelson and Makko (2005) gives an example on the local people struggles for conservation benefits in Tanzania by reflecting on the complexities of establishing and managing WMAs from the policy and on-ground experiences. They do this by explaining the struggles from the Olosokwan village in Serengeti village. Nelson & Makko (2005) links the struggles with the complex establishment processes of establishment and management of WMAs by local people by focusing on the Wildlife Policy of Tanzania (1998) and local people perceptions on the WMAs establishment and experiences. They argue that the Wildlife Policy released in 1998, advocated for devolving managerial responsibility for wildlife to local communities and enabling these communities to capture economic benefits from the resource in order to create incentives for conservation. The policy's aim was for rural communities and private landholders to manage wildlife on their land for their own benefit. Nelson and Makko (2005) further argues that Wildlife Management Areas (WMAs) are the policy's proposed administrative mechanism for accomplishing this objective. The policy intends for communities to designate WMAs on their village lands in order to conserve wildlife and its habitats, and in turn, that communities will be granted limited wildlife user rights from the government so that local people can manage and benefit from the resource. According to the Wildlife Policy of 1998, a village contribute a portion of land to form a WMA. A WMA is then managed by a representative organization that the communities will form.

Once it has completed various prerequisite steps, such as preparing land-use plans, registering with the Tanzanian government, and preparing a management plan for the WMA, the representative community-based organization (CBO) is granted limited user rights to wildlife living in the WMA. Benefits from wildlife uses and investments in the WMAs will be controlled and managed by this CBO, not by the village governments. They continue that historically, conservation in the Serengeti ecosystem has largely meant the exclusion of local people from using lands and resources through the establishment of state-protected areas and enforcement of restrictive laws. Nelson & Makko (2005) explain that for villages such as Ololosokwan, this means abandoning authority for tourism management and control of benefits to an external body, and possibly reducing its revenues. They further explain that more fundamental reason for opposition to the implementation of WMAs in Ololosokwan is rooted in the historical context and the villagers' attitudes toward conservation based on their own experiences. WMAs are being promoted by a central authority, the Ministry of Natural Resources and Tourism, in concert with the Frankfurt Zoological Society (FZS), an

international conservation NGO that provides considerable financial and technical support to protected area management in Tanzania. FZS is also, however, an organization with a long history in the Serengeti and in working to create the Serengeti National Park the Maasai communities was evicted in 1959. From such experiences, local people in Ololosokwan view WMAs establishment as merely the latest in a long series of outside conservation efforts to displace them and appropriate their lands and resources. Such local perspectives are not unique to those from Loliondo and in Simanjiro District, adjacent to the Tarangire National Park, where the context of alienation and encroachment on village lands from conservation authorities is similar. Nelson and Makko (2005) concludes that from the local people perspective, WMAs in Loliondo appear less like a devolutionary effort to support local resource management objectives, and more like a new manifestation of outside interests and conceptualizations of what communities should do to perpetuate centralized conservation practices.

Another study by Formo (2010) on the WMAs as a conservation strategy in Tanzania helps to shade a light on issues related to management and benefit sharing, transparency and accountability of the WMA management, participation by villagers and at large benefit and costs of the WMA regime. The study on the Ngarambe and Tapika WMAs reveals that the main problem with benefit – sharing is that local people were not able to monitor the use of wildlife resources in the areas thus a consequence that they are not sure if the money shared to them by the central authorities is the accurate amount. On issues related to transparency in the management of WMA, the study revealed that participation was a direct consequence of the villagers' knowledge on the importance of the WMAs. Formo (2010) substantiate that the WMA management in Tapika seemed to be more transparent and accountable than in Ngarambe where the Village Council posed a particular problem and rumours as well as some indicators of poor governance were present.

Wilfred (2010) stresses that the importance of land as a fundamental resource in conservation of wildlife cannot be over emphasized especially in rural Tanzania where most wildlife is found and where a significant proportion of the landscape is used for agriculture, grazing, and settlement.

Wilfred explains that, as human population density near wildlife rich areas increases even more land is needed for livelihood maintenance and that this has increasingly brought human land-use zones into contact with conservation areas. Wilfred (2010) affirms that there has been a negative trade-off between rural communities' interest in land use and conservationists' interest in healthy wildlife populations. Wilfred gives some vivid examples from Tanzania where he mentions that in some areas of Western Serengeti National Park in Tanzania, wild animals have found themselves on the frontline of land-use conflict with pastoralists also that a displacement of Wagalla people from Ugalla Game Reserve in Western Tanzania in the 1960s contributed to the current poor support of local communities for conservation efforts. All these are only a few examples showing how land and its resources have become a source of friction between wildlife and human beings.

Benjaminsen and Bryceson (2012) extremely argues that in Tanzania dispossession in the wildlife sector has been facilitated by government policies and laws occasionally combined with the use of violence to enforce the laws. They continue that the wildlife policy of 1998 that brought with the suggestion of establishing the Wildlife Management Areas have provided new mechanisms for the appropriation of benefits originating in pastoral and village land. They argue that the resulting dispossession takes place through loss of access to pastures justified by a narrative about overgrazing, lost control over benefits from tourism combined with the State's lack of information-sharing with villagers and its lack of transparency in handling collected tourist fees, and lost control over crops through increased crop damage by wildlife. Benjaminsen and Bryceson (2012) continues that the win-win discourse promotes an integration of interests of local people as a means to achieve conservation. Thus, the set-up involves aspects of benefit sharing, compensation, and local participation, and the partnerships are argued to constitute win-win situations implying both environmental conservation and local development. They conclude that the win-win discourse apparently goes against accumulation by dispossession, but they argue that in practice it is the win-win discourse that has facilitated accumulation by various actors as well as a gradual dispossession by local resource users in the wildlife sector in Tanzania.

2.1.3 The contribution of the experiences of political ecology studies from Tanzania to this study

The literature review about contradictions in conservation of natural resources in Tanzania reveals issues related to complexities in accessing and use of land resources by local people after WMAs formation. In the case of Olososokwan Neumann, (1997) local people related the establishment of WMAs with the external pressure from conservation NGOs and that their influences through funding on conservation issues led to issues like local people eviction to leave areas for national park creation. The studies also revealed conflicts between local people and wild animals, conflicts between local people and conservation organisation as explained by Neumann (1992); Neumann (1997); (Nelson and Makko 2005) and land grabbing issues in the name of conservation as explained by Benjaminsen and Bryceson (2012) helps this study to shape and define the perceived costs and benefits as a result of their living on the edges of the wildlife corridor that forms the SNTFCA.

This study uses the political ecology framework the study establishes issues (complexities) related to local people access and use of resources, local people participation, and decision-making and at large the distribution of benefits and costs to local people because of the establishment of the wildlife corridor. The study will use the above experiences only as a platform to establish the contemporary situation in the Likuyusekamaganga village. The experiences helps this study to set a platform of establishing if there will be conflicts in accessing and use of the resources from the corridor and who is behind the move to limit local people from accessing the wildlife corridor and its resources.

2.2 The conceptual framework

I operationalize political ecology framework in this study in line with (Robbins 2004) who argues that political ecology devotes some energy to the study of protected areas especially on their overall interest of formation with regard to issues like control of the forms of access resources use and distribution of benefits and costs. I also pick a notion from Sutton & Anderson (2009) who argues that actors involved in formation and managing the protected areas must in some cases must show that local people are as important as the areas they occupy because these people have occupied the same areas for many generations and their practices can be seen as an important aspect natural resources management in the areas.

However, experiences show that in establishing the conservation units local people are evicted from the land they have been living onto either willingly or not (Neumann 1992; Neumann 1997; Watts 2000; Noe, 2010). In the case of the SNTFCA, Noe (2010) argues that local people willingly relocated to leave a space for the formation of the wildlife corridor under situations that they would in-turn benefit.

While putting an emphasis on Sutton & Anderson (2009) argument that in formation and on the management of protected areas, that it is the conservation NGOs and the state that make decisions about who can access the land and how it can be used, I choose three (3) aspects of political ecology to and examine perceived costs and benefits of local people as result of their living on the edges of the wildlife corridor forming the SNTFCA.

The three political ecology aspects chosen are in regarding issues related to access and management of resources, participation, and decision making regarding resource use and distribution of benefits and costs. These aspects are reflected in the topic list developed for data collection (Appendix 2). I refer to these aspects in this study as they are the ones that are presumed to determine perceived benefits and costs in form of: if there is free or limited access and use of resources after establishment of the wildlife corridor and how are local people being affected; the extent to which local people participates (or not) in issues related to resource use in the corridor and issues related to distribution of benefits and costs to actors involved in managing the wildlife corridor.

In this study, I examine the situation regarding access and management of resources in the wildlife corridor in line with Escobar (2006) who provide that conflicts over access and control of natural resources are a key factor in today's global and local crises. Escobar (2006) argues that in the name of conserving nature most of the time the traditional uses of the resources are subject to be neglected thus either constructing or destructing costs and benefits of local people involvement. To establish issues related to access and resource use, study looks at how the present conservation organisations, the state and local people handles issues related to access and management resources in the wildlife corridor. The study focuses on local people and for such a reason the study tracks issues related to local people access and use of the resources in the wildlife corridor by looking at elements like:

if there was relocation and the subsequent impacts; presence of no entry zones (demarcated borders on the pieces of land) that limits local people from accessing the resources and how are local people impacted; local people awareness about their resource rights but have no room to access and make use of them; local people views on existence of measures allowing or protecting them from accessing natural resources they were used to and any other issue related to access and resource use in the wildlife corridor.

I will also establish and analyse issues related to participation and decision making from the presumption that it is through participation and decision-making that issues regarding resources use and access, as an attempt to maximise benefits and reduce costs of their living on the edges of the corridor can be accommodated. Perkins (2005) definition and approach to public participation will lead the study to establish and analyse participation and decision making issues in Likuyusekamaganga village by referring to issues like: when we say public participation do we really mean enhanced voice and access for a certain segment of the public; to what extent are raised voices through participation are encouraged and that the outcome will have an effect on public policy and at large and what guarantees or existing indications that the outcome of the public participation process will be taken into account in decision-making. To achieve this, the study looks at elements related to: evidences that local people have a say in decision making processes regarding resource use; evidences that local people are guaranteed participation and are given a chance to speak out in conflict resolving processes (if they are there); evidences and clear that local people are heard and satisfied that their opinions taken into account by respective bodies or local people proof that their opinions are taken into account and enforced and any other proof that assures local people participation in decision making processes.

The aim of the study is to establish local people perceived benefits and costs because of their living on the edges of the wildlife corridor that forms the SNTFCA. I refer and conceptualise the concepts terms 'costs and benefits' in concurrence with Lewis (1996) that, many protected areas appear to provide most benefits to the nation at large, which is why they are called "national parks" or "national nature reserves", or even for the entire planet, which is why some areas are given World Heritage status.

Furthermore, I operationalize the terms ‘costs and benefits’ in accordance to Lewis (1996) who also explain that, protected areas are a net cost to the people who live in and around them, either in terms of decreased access to resources, crop damage from wild animals, or the opportunity cost of using that habitat for another purpose. To achieve this, the study looks at issues related to: local people evidences that they benefit regardless of them being limited access to the resources they were used to; local people proof they are being provided with alternatives to sustain their lives as a result of the establishment of the corridor; a proof that the existence of the protected area enhances offering of employment, a proof that revenues are shared and local people are satisfied; and any other proof to supplement the corridors’ conservation benefits or costs.

2.3 Definition of key terms

This study used and operationalized the use and existence of several key terms. Below are key terms in used in this study.

Trans-frontier Conservation Areas (TFCAs) is a term used to refer to relatively large areas, straddling frontiers between two or more countries and cover large-scale natural systems encompassing one or more protected areas. TFCAs involve a unique level of international co-operation between the participating countries, particularly issues related to the opening of international boundaries for facilitating carrying out of the objectives of their establishments (<http://www.dfa.gov.za/foreign/Multilateral/inter/tfcas.htm>). In this case, the TFCA in reference is The Selous – Niassa Trans-frontier Conservation Areas that is a result of the agreement of formation and protection of the wildlife corridor linking the Southern part Selous Game Reserve in Tanzania to Niassa Game Reserve in Mozambique. TFCAs are a result of activities and interests of actors, the term defined as here below.

In this study the term ‘actor’ (s) is used to refer to all those who are involved in the processes of formation and management of TFCAs. In this study, actors refers to institutions and organisations to mean the Government or the state, international, and local non-governmental organisations, private sector, business sector and local people in the TFCA.

The study finds actors important, as it is the activities and interests of all these actors that define the contemporary situation in a TFCA.

The term ‘local people’ as used in this study to refer to indigenous people who their village land forms the TFCA. They are the people who were born in the villages or grew up and live in the area of study.

The term ‘edge’ is used in this study to refer to the what Andersson *et al.*, (2012) refers to as the divide between protected areas and their hinterlands either denying or allowing access to the protected area under certain arrangements between actors. They inform that these edges also known as borders are dynamic and that they may be geographical lines on maps, a physical barrier, or a fence that restricts movement of animals and humans.

In this study ‘costs and benefits’ are terms concurrently used to refer to the extent and specific ways into which local people perceive them as being a fortune or a curse as a result of their involvement in the processes of establishing and managing the TFCA. In this study, costs are presumed to be issues related to,

- local people exclusion from accessing and use the resources they were used to
- denied a say in issues affecting them
- being ignored by other actors in issues negatively affecting them

As opposed to benefits that include things like,

- Improved infrastructure in form of construction of roads, hospitals, schools
- Revenue sharing following investments in the area

3. RESEARCH DESIGN AND METHODOLOGY

The study aimed at establishing local people's perceived benefits and costs as a result of their living on the edges of the wildlife corridor linking the Selous and Niassa Game reserves to form the SNTFCA. The study adopted one-on-one interviewing, focus group discussions, and observations as primary data collection methods. Secondary information was obtained through reviewing the status and progress reports of the wildlife corridor management and recommended websites with information about the wildlife corridor. Details on the execution of the methods for data collection are described in section 4.3 below.

3.1 The Wildlife Corridor and Likuyusekamaganga village overview

The Selous – Niassa Wildlife Corridor of Tanzania shares the border with the Niassa Reserve in Mozambique on 176 km length following the course of Ruvuma River (Schuerholz & Baldus, 2007). The network of Wildlife Management Areas extends towards the national border with Mozambique in the south to create the SNTFCA (Goldman 2003). I emphasise that it is a bunch of villages that needs to establish a WMA (GTZ, 2005; (Noe 2010) before they stand to be involved in the SNTFCA. In Tanzania the creation of WMAs serves two main and interrelated goals: first, to release communal land for nature conservation, including conservation outside formally protected areas; and second, as a prerequisite for realizing plans for TFCAs (Ramutsindela and Noe 2012).



Figure 1: The Selous - Niassa Wildlife Corridor that forms the SNTFCA

Source: Tanzania Wildlife Corridors (2013)

Likuyusekamaganga village, which is one of the seven (7) that makes up the Mbarangandu WMA is, located Namtumbo District, Ruvuma region - Tanzania. The Namtumbo District was established in the year 2002, three years before the government of Tanzania initiated the conservation of the wildlife corridor in 2005 with the support from Global Environmental Facility/UNDP. The administrative boundaries of the District stretch towards north as far as into the Selous Game Reserve. The reserve has area of about 47000 km² making it the largest game reserve in Africa. The National Government through the Wildlife Department has the mandate to manage this reserve resources and hunting tourism in the hunting blocks. The history of the communities living in Selous Game Reserve links with those living in northern Mozambique through among others connections but the strongest reason being the history of the long distance trade on old trading routes. The original ethnic group living in the area were the Udengule and Ngindo. Nowadays the area (Selous Game Reserve) is settled by the main ethnic groups of Undendeule, Ngoni, and the Yao with the latter still having cross-border ties with and relatives in the Niassa Reserve. The Ngoni, a splinter group of the Zulu warrior tribe, immigrated from South Africa and the Yao known and ivory trade moved in from Mozambique in 19th C (GTZ, 2005).

3.2 Study area: Justification of its choice

The selection of the research area and respondents was purposively done. I wanted to conduct a study with regard to Trans Frontier Conservation Areas and how local people are captured in their formation and management. For such a reason the Selous – Niassa Trans-frontier Conservation Area was the only choice when talking of Tanzania's involvement in Southern Africa TFCAs. There are also two districts covering the wildlife corridor linking the SNTFCA i.e. Namtumbo and Tunduru. The Namtumbo District in Ruvuma region was established in the year 2002, three years before the government of Tanzania initiated the conservation of the corridor in 2005 with the support from Global Environmental Facility and United Nations Development Programme (Baldus and Cauldwell, 2004). Major areas of Namtumbo District are parts of the wildlife corridor links the Selous and Niassa Game Reserve to form the SNTFCA. The Mbarangandu WMA in Namtumbo District started in 1989 (Baldus and Cauldwell 2004). The Mbarang'andu WMA has seven villages to include Kitanda, Nambecha, Likuyusekamaganga, Mchomoro, Kilimasea, Sngambele and Mtelawamwahi. Amongst the 7 villages making up the WMA, Likuyusekamaganga village was chosen. The village was chosen under the basis that villagers would had more advantage to the study in terms of information regarding the wildlife corridor as it is the only village where the National Community Based Tourism Training Centre is constructed as part of the benefits of its inclusion in the formation and management of the wildlife corridor (Hofer and Begleitprogramm 2004). The researcher also presumed that the older the WMA, the higher the chances that villagers have the knowledge and good experiences regarding the on-going activities in the wildlife corridor. There is also an-ongoing uranium exploration in the WMA, and my interest was to see how mining and conservation activities would be compatible to each other and especially from the perspective of what extent local people are affected.

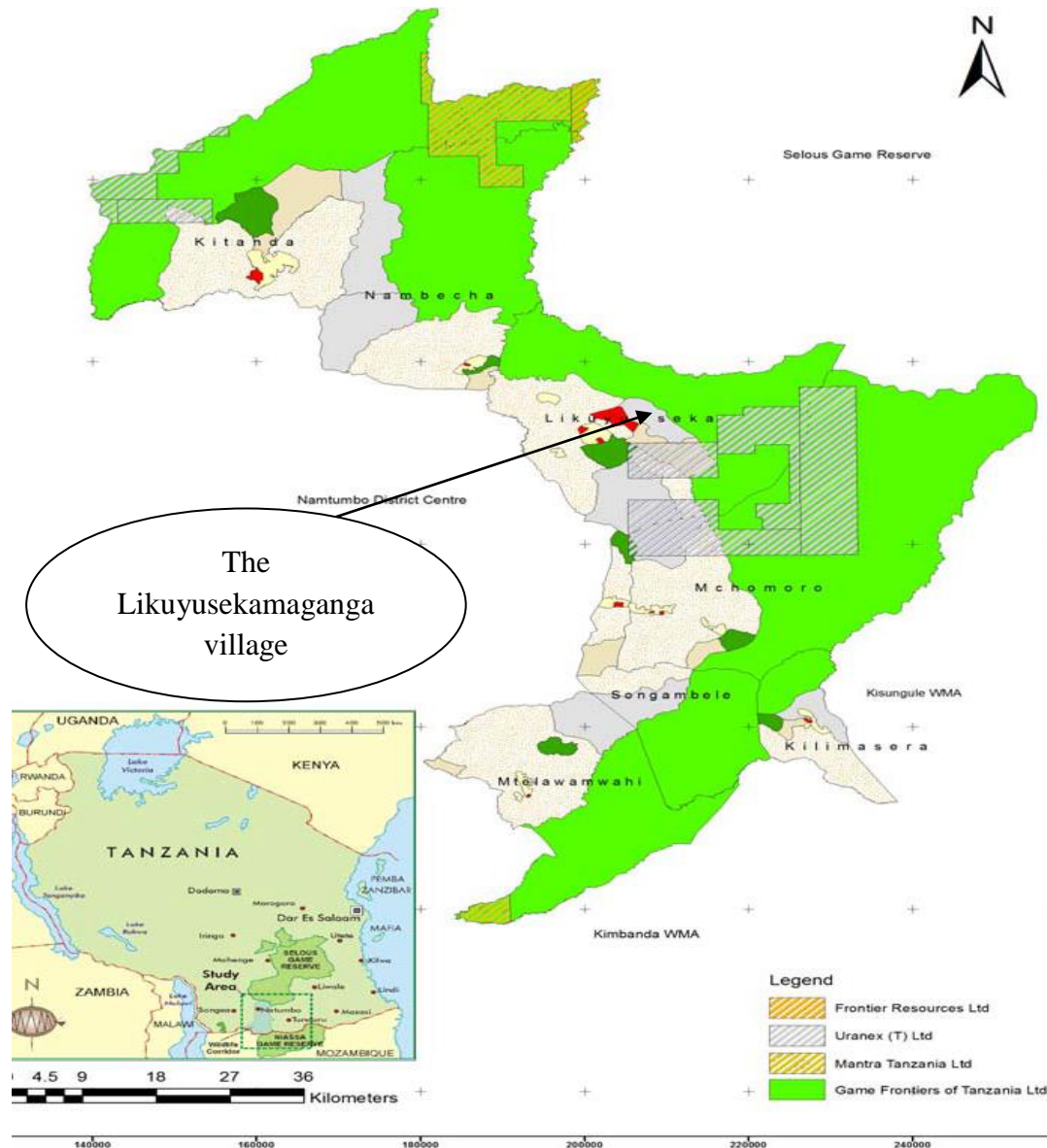


Figure 2: The Mbarang'andu WMA in Namtumbo District, Tanzania

Source: Adapted from Noe (2013)

3.3 The research strategy

The research plan involved identification of respondents and their locations. In this case topic list with questions operationalized in one-on-one interviews and focus group discussions questions were developed (Appendix 2). One-on-one interviews and focus group discussion as primary methods of data collection were executed.

To allow for easy and acceptability to access respondents it mandated the researcher to introduce the subject of the study to the Mbarang'andu WMA management who approved conduct of the study and linked the researcher to relevant bodies to include the Selous Niassa Project Country Director, The District Game Officer, the tourism company-Game Frontiers of Tanzania management (only investor in the WMA) and also it is the WMA management that linked me to local people especially the village natural resource conservation committee. The flow of interview and focus group discussion methods of data collection tracked the same plan as explained in Figure 2. The study involved pre testing of the content of the interview schedules on the first day of interviews. After pre-testing I made some changes by deleting questions that aimed at establishing respondent's tribe, age, family size and occupation. Local people rejected these questions during pre-testing. They argued that it was important for them to attend my study concerns rather than establishing their age, marital status, occupation, age and family size.

3.4 Respondents Selection

Purposive sampling as a method of respondents' selection was adopted during the study. This is for the reason that, in qualitative research, the sample is intentionally selected according to and with purpose of suiting the needs of the study. The respondents also known as cases are specifically chosen because they can teach us a lot about issues that are of importance to the research (Boeije 2009). In this study, the sample of local people was purposively selected to include representations of the village council and the village conservation committees also villagers not involved as leaders either the village conservation committees also villagers not involved as leaders either the village conservation committees also villagers not involved as leaders either in the village council or the village conservation committee (Appendix 1). By following the description of Boeije (2009), purposive sampling was also adopted basing on the prior information needed by reflecting on what was needed to address interviews and focus group discussions topic list and questions. On the selection of local people not attached to management responsibilities, a snowballing method was involved. Snowballing is a method of respondents selection where initial number of respondents are asked for the names of others who are subsequently approached (Boeije 2009).

Snow-balling was necessary from the fact that, the research time collided with crops planting season and this made accessing respondents relatively difficult. Section 4.5 below gives details of the problems encountered during the research in relation to accessing respondents. In this research, thirty four (34) respondents were covered (Appendix 1). This number of respondents (34) is satisfactory to this study for the reasons that an occurrence of a piece of data or a code is all that is necessary to ensure that it becomes part of the analysis framework. Frequencies are rarely important in qualitative research as one occurrence of the data is potentially as useful as many in understanding the process behind a topic (Mason 2010). In addition, because analyzing qualitative research is very labor intensive, analyzing a large sample can be time consuming and often simply impractical (Crouch and McKenzie, 2006; Mason, 2010).

3.5 Data Collection

The primary data collection process involved three methods i.e. one on one interviews, focus group discussions and observation while secondary data was obtained from documents supplied to me by the District Game Officer, SNWPC office, The WMA management, and progress reports about the corridor as recommended and obtained online. In this study, the topic lists with specific questions regarding access and use of resources in the corridor, participation and decisions making processes and costs and benefits distribution were developed before going to the field (Appendix 2).

3.5.1 Primary Data Collection

3.5.1.1 Interviews

A total of fifteen (15) one-on-one interviews were successfully operationalized to obtain the reaction on study topic the influence of local people on the management of the wildlife corridor linking Selous and Niassa Game Reserves. These interviews were all conducted in “Swahili” language from 06/12/2012 to 28/12/2012. The categories of respondents covered in the interviews are residents of Likuyusekamaganga village (local people), a representative of the Game Frontiers of Tanzania (the only investor and Tourism Company in the area), a representative from Game Officers Unite, the management of the Selous Niassa Wildlife Corridor Management Project and members from Mbarang’andu WMA Management (Appendix 1).

3.5.1.2 Focus Group Discussions

Four (4) focus group discussions resulting into the incorporation of reactions from twenty nine (29) respondents were successfully conducted. The language used in the focus group discussions was “Swahili”. The focus group discussions were held on 13, 14 and 19/12/2013. The categories of respondents, which underwent focus group discussions in this study, are Village Game Scouts, Rangers, members from the village council and members from the village conservation committee. The focus group discussions took place at the offices of the village government (for members from the village government and village conservation committee) and for the rangers and village game scouts the focus group discussions took place on the field during patrol for anti-poaching activities. During the focus group discussions with local people (the village council and the village natural resource conservation committee), I executed the same questions as used in one-on-one interviews. I also did the same onto rangers and village game scouts by using the topic list and questions meant for government workers. These groups (Appendix 1) were priory determined by the study to have the most characteristics that made them more relevant to answer the questions. For example, questions with poaching elements would mostly be answered well by village game scouts and rangers. This process is referred to as purposive sampling (Guarte and Barrios 2006).

3.5.1.4 Observation

Participant observation is the process enabling researchers to learn about the activities of the people under study in the natural setting through observing and participating in those activities (Kawulich 2005). The researcher had a chance to observe the village game scouts and rangers especially when they were describing situations they face in relation to the hardships they face in patrolling activities. During focus group discussions, the researcher also observed the body language of the villagers when they were for example describing their annoyance and conflicts they had with leaders and the investor. Newly constructed office buildings that villagers claimed to have been constructed under standard were also observed.

3.5.2 Secondary Data Collection

During visits in the offices of the Mbarang'andu WMA, The District Game Officer and The SNWPC office, the researcher was supplied with documents with details on the establishment, progress, status and challenges in relation to managing the wildlife corridor. These documents supplemented verbal information obtained during interviews and focus group discussions. During field visits in these offices, the researcher obtained the following official documents: annual minutes of meetings about distribution of revenues from friends of Mbarang'andu, the guidelines on local people involvement in natural resources conservation in Namtumbo district of the year 2005, the reports on the status of the Mbarang'andu and management of the wildlife corridor to include the fee structure of hunting for local people, and the official website of the ongoing activities about managing the corridor was also revealed by the country director. The Country Director of the Selous – Niassa Wildlife Corridor Protection, the project under KfW sponsorship who is concerned with the government activities in managing the wildlife corridor also advised the researcher to visit the website² of the project to know about the partners of the management. The information obtained from the recommended websites official website of the wildlife corridor management helped the researcher in verifying the information obtained through interviews and focus group discussions.

² The websites visited were: (<http://www.selous-niassa-corridor.org/wildlife-corridor/music-from-ushoroba/>); (<http://www.selous-niassa-corridor.org/partners/> and <http://www.pamsfoundation.org/partnerships>).



Figure 3: Data collection plan

Source: Researcher operationalization of data collection processes, 2012.

3.6 Data Analysis

All interviews and focus group discussions were recorded in Swahili language. The first step taken was to translate all interviews and focus group discussions information to English language. This process is known as data preparation where transcriptions of audio and visual sources takes place in order to allow the researcher to work with texts, sometimes in combinations with the original recordings (Boeije 2009). In this case, there were only audio recordings. The transcripts were read repeatedly to identify themes within the transcripts, the process known as coding. In qualitative studies, coding means identifying themes within your interview notes, documents, or field observations that relate to the research questions in your study. To explain what are themes, Berkes (2004) explains that themes are common ideas and patterns that the researcher observes repeatedly s/he read the data collected information. The process may often require reading the transcripts repeatedly to identify themes³.

³ Supplementary information on themes development was obtained from (http://www.ehow.com/how_5188889_analyze-qualitative-data.html#ixzz2OmC9KsRR).

In this case, all themes were developed in and to reference to research questions and the three main issues⁴ with regard to the political ecology theoretical framework. At this stage, the researcher verified if the information obtained answers the research questions within the theoretical framework. Constant comparison and analytical induction helped the researcher to develop a pattern-coded analysis table with study findings⁵. Constant comparison helps the researcher to describe the variation that is found within certain phenomenon, and wherever possible to indicate in which situations different variations of the phenomenon manifest themselves (Boeije 2009). The analytical induction strategy helped the researcher in trying to find the best fitting theoretical structure of their research material (Boeije 2009). In researches that aims at explaining phenomenon like this one especially on the actors involved on the management of the wildlife corridor then analytical induction was appropriate also supported by (Boeije 2009). In developing the empirical findings table, open and selective coding was the strategy later checked by a computer programme for qualitative data analyses known as “atlas.ti”. The open coding strategy was adopted because this requires that all data collected be carefully read through and divided into fragments and especially fragments that are relevant to the study. These fragments are then grouped into categories of the same subject labeled with a code. The open coding process went hand in hand with selective coding as supported by Boeije (2009) and that it helped me to look for connections between categories in order to make sense of what was happening in the empirical findings. This process helped in integrating the loose pieces of data after earlier step of open coding. The connections between the processes of constant comparison, analytical induction, open and selective coding later checked with the atlas.ti programme revealed the empirical findings summary table. The computer programme “atlas.ti” is a programme that helped the researcher to see and verify transcripts that were cut and pasted into the relevant codes in the empirical findings table. The programme purely follows the command of the researcher. It is the researcher who has to know what the computer needs to (Boeije, 2010).

⁴ These issues are related to access and use of resources, participation and decision making and distribution of benefits and costs.

⁵ A pattern-coded analysis table is a table with a summary of themes/codes and details supplementing the themes on the rows and the specific respondent on the columns.

When I used open coding option using the computer programme “atlas.ti” more or less of the same look as in the empirical findings summary table was obtained priory using the codes developed manually. The programme only helped me in terms of more accuracy in search of key words in the empirical findings. I also have to accept that I was only interested with developing codes in the programme; I did not have time to explore other functions as already the necessity was facilitated.

3.7 Quality and Limitations

3.7.1 Quality of the study

The quality of this study heavily relies on the constituent of respondents which reflects the level at which the study captured the required information, the theoretical framework used and the accompanied topic list developed before going to the field for data collection.

To start with is the constituent of the respondents. The study captured responses from a variety of main responses to include representatives from the WMA management, the village council, village natural resources conservation committee, the district game officer unit that is responsible for patrol and carrying out of anti-poaching activities and law enforcement. The study also effectively captured the responses from the country director on the Selous – Niassa Wildlife Protection Programme funded by KfW, the responses from only investor in the WMA and solo villagers during one-on-one interviews. I trust that it is through these meetings, through face-to-face interviews and focus group discussions supplemented by participant observation as primary data collection methods that strengthen the validity and reliability of the information obtained is guaranteed. I confidently take this stance from a sense that, a careful development of the topic list and relevant interview questions in relation to the political ecology framework was considered. I left for data collection after being assured that the topic list intended to collect data reflected the purpose of the political ecology framework and the research objectives and questions. The arrangements for meeting all respondents was largely facilitated by the WMA management and respondents and the pre-testing of the interview schedule reveled that local people were not in agreement with exposing their tribes and ages.

During focus group discussions with the village council members and the village natural resources conservation committees, they told me that the information obtained to them was reliable and that they were the true representatives of other village feelings. I have a feeling that I could not go further and affirm this. I did try to check the responses during interviews with local people not attached to the management bodies where snow balling method was used. I confirmed that local people had almost the same feeling especially on the problems regarding the existence of the wildlife corridor. For example all local people mentioned problems like ruinous animals, lack of transparency in funds distribution etc. In depth, descriptions on the empirical experiences regarding the study and the responses are well described in chapter five where continuous use of quotes of responses is used. I also affirm that I did try to have less influence on the responses and this quality is expected from a researcher especially when trying to expose reality and feelings of people.

3.7.2 Practical problems and reflection

In this section, I purposely explain the practical problems encountered during data collection processes. I find this important as gradually these limitations rises an awareness on the level of commitment required when planning to conduct studies in interior and moreover in developing countries. Things and flow of activities on the other part of the world (third world) can never be guaranteed. Most of the time, sacrifices and high levels of ability to lobbying are required.

To start with is the accessibility of the study area. The area of study chosen was Likuyusekamaganga village in Namtumbo District found in Ruvuma region on the Southern part of Tanzania. The village is approximately 976 km from Dar to Songea⁶, which relatively a long distance on travel by bus. The one-way trip by bus is Tshs. 100,000, approximately 50 Euros. Buses from Dar es Salaam, the main business city of the country are mostly reliable. There are no flight operations for public to Ruvuma region. Motor bikes are the main transport mode from the District headquarters to the villages. The price is upon negotiations.

⁶ The distance from Dar es Salaam to Songea was obtained from ([http://www.distancesfrom.com/tz/travel-time-from-Dar-es-Salaam-to-Likuyusekamaganga Namtumbo/TravelTimeHistory/1566316.aspx](http://www.distancesfrom.com/tz/travel-time-from-Dar-es-Salaam-to-Likuyusekamaganga-Namtumbo/TravelTimeHistory/1566316.aspx))

The available accommodation facilities are relatively ‘very basic’ and up to the time of data, collection there was no supply of electricity to the District and to the villages. Generators are the reliable source of power. All these situations required an absolute tuning of my mind to cope with the natural environment. I insist that going there requires a well-planned itinerary with prior ‘mind setting’ and accepting that it is another world and someone has to be ready to face the reality. High level of patience and respect matters.

I also take this opportunity to warn that doing research in interior areas requires a high level of patience and conceding that are always being done differently. I had to acknowledge and accept that religious beliefs have a very strong influence and I could not operationalize data collection processes from Fridays to Sundays. Local people are not so welcoming in these days. The reason is I could not tell who belongs to what religion and faith and plan for a meeting. The first experience in the first week of data collection influenced my plan not to work on these days.

Interviewing language, all interviews were conducted in Swahili language that is the national language of Tanzania. Local people skills in speaking English language are limited and this made translation of the scripts laborious and a time consuming. I also had no assistant in the data collection processes for budgetary issues. I can imagine that having an assistant would probably fasten transcription processes. It is however of no harm that still I did manage to work meet the thesis contract timings. I bring this forward to insist that, a person who is not fluent in Swahili language may necessarily require an assistant to facilitate handling of the processes of data collection.

On the primary data collection method, I observed and realized that, local people prefer to talk and expose their problems when they are in a group rather than when you meet them one-on-one. Local people lose confidence and they show sign of not being comfortable when you meet them one-on-one and they act on questions by giving short answers. More details were obtained using focus group discussions which show the number of respondents in each method of data collection involved.

3.8 Researchers' Positionality

This was my first ever visit to Southern Tanzania. I went to Ruvuma region with a prior knowledge that the timing was not at my favor. This is the time when the Southern part of Tanzania was hit by local people demonstrations regarding uranium mining and gas issues exploration. The demonstrations were meant to ask for more government attention to the local people and that local people wanted assurance of more benefits from such explorations. This situation made it difficult to access and being accepted by local people. Local people revealed antagonistic character to whoever looked a stranger to them. My introduction that I was studying in Europe and also a government worker made it difficult in the first days. I really had to pursue and guarantee them that I came to their village for only study purpose and I was not in any case related to what was going on. I was successful though I was very cautious when I visited local people.

Regardless of prior warning that I was supposed to be careful when approaching local people who were highlighted in the media as rivals to the government. I never lost my purpose. I had an interest with the topic itself. My ambition to complete the study as solo researcher gave me more courage. I always imagined how happy would I be after managing to collect data and write my first research using the political ecology framework. I concede that this was the first time to use the political ecology framework for research and I really had to struggle to come on top of it. I was also familiar (through local media) and my previous job as a Tourism Officer shaped my mind about the conflicts in conservation and how local people can act when they need to be listened by the government. I had heard much about conflicts in community natural resources management and I treated this study as my entry point to revealing the situations. To this level when I have managed to write down this thesis, I am absolutely satisfied with my courage and my never give up spirit in achieving my goals as I look forward to becoming a recognized researcher in politics of conservation.

4. THE CONSERVATION INDUSTRY PRACTISES: EXPERIENCES FROM TANZANIA AND SUB SAHARAN AFRICA

4.1 Land tenure system in Tanzania

The study finds it important to have a look on the Tanzania's' land tenure system with an aim to establish land management and their categories. It is from this juncture where the study screen the role of villages like Likuyusekamaganga in land management issues, the very land that is set aside as protected areas when talking of conservation. Tanzania has a total land area of about 945,000 square kilometres including the Zanzibar archipelago. The mainland terrain includes highlands in the north and south and a central plateau. In general, all land in Tanzania is public and vested in the President who is the trustee of the land for and on behalf of the citizens of Tanzania. For the purposes of management, all public land falls into three general categories under the Land Act. These categories are: (a) General land, (b) Village land and (c) Reserved land (Tanzania land and village Act, 1999) as cited in (Shivji 2002). The fundamental principles of the new national land policy have been incorporated in the new land Laws - Land Act No.4 and Village Land Act No.5 passed by Parliament in 1999. The entrenched fundamental principles of the Land Laws as substantiated by Sundet (2005) are:

- (i) To recognize that all land in Tanzania is public land vested in the President as trustee on behalf of all citizens;
- (ii) To ensure that proper distribution of and access to land by all citizens;
- (iii) To regulate the amount existing rights in land and recognized long standing occupation or use of land are clarified and secured by the law;
- (iv) To facilitate an equitable of land that any one person or corporate body may occupy or use;
- (v) To ensure that land is used productively and that any such use complies with the principles of sustainable development;
- (vi) To pay full, fair and prompt compensation to any person whose right of occupancy or long standing occupation or customary use of land is revoked or interfered with to their detriment by the State or is acquired;
- (vii) To provide for an efficient, effective, economical or transparent system of land adjudication;

- (viii) To enable all citizens to participate in decision making on matters connected with their occupation or use of land;
- (ix) To facilitate and regulate the operation of a market in land so as to ensure that rural and urban small holders and pastoralists are not disadvantaged;
- (x) To set out rules of land law accessibly and in a manner which can be readily understood by all citizens;
- (xi) To establish an independent expeditious and just system for the adjudication of land disputes which will hear and determine cases without undue delay;
- (xii) To encourage the dissemination of information about land administration of information about land administration and land law through programmes of public and adult education using all forms of media; and
- (xiii) The right of every adult woman to acquire, hold, use and deal in land shall to the same extent and subject to the same restrictions be treated as a right of any adult man.

According to Shivji (2002), the issue of what constitutes village boundaries has been one of the most contentious terrains between local communities and state or other landholders allocated land by the state. Shivji (2002) argues that, the boundary issue obviously is not simply one of demarcation or geographical space rather it is about resources and, very frequently, common resources. That, this is so because it is precisely the common community resources like pastures and forests which may not physically occupied by households but to which the community has defined access. He continues that, yet, it is easier for outside interests, including the state, to rationalise and justify excluding such lands from village land on the ground that they are unoccupied lands. In relation to setting aside of the land for conservation, Junge (2002) explains that the major forms of land use in Selous Game Reserve (SGR) that were identified were areas for settlement, agriculture, fuel wood , livestock grazing, areas for future expansion and areas for wildlife management. That, to minimise conflicts between land uses such as agriculture, livestock grazing, and wildlife, the different land uses mapped. The zoned areas in reference are the WMAs. Junge (2002) continues that, WMAs have been zoned out as buffer areas to Selous Game Reserve and are used for sustainable wildlife utilisation with the goal of procuring sustainable economic benefits from wildlife resources.

Each WMA has legal administrative boundaries based on village land use plans approved by the districts and may include one or more villages. Other designated forms of land use in Selous include forestry reserves, wood lots, bee keeping, swamps, agricultural areas, roads, and settlements. In relation to this study, I will track the processes of local people involvement in managing the wildlife corridor given that it is the network of WMAs that forms the wildlife corridor referred to here. The interest is on the extent to which villagers and other actors (to be identified) access and make use of resources, participation in decision making regarding resource use and at large their distribution of costs and benefits given that they lived in these lands before WMAs formation.

4.2 Conservation and management of natural resources in Tanzania: The Policy and WMAs approach

4.2.1 The Wildlife Policy of Tanzania

The Wildlife Policy of Tanzania (1998) introduces a category of protected areas to form of WMA for the purposes of effecting community-based conservation. WMAs formation are encouraged in this policy as they are expected to ensure that wildlife conservation competes with other forms of land use through realisation of the benefits of foregoing large prices of land for wildlife conservation in favour of other uses like agriculture and pastoralism. The policy also establishes the platform of promoting legal use of wildlife and its products, adopting measures that bring equitable share of benefits, encouraging the private sector involvement in supporting the protections of wildlife and development of wildlife areas. The idea behind formation of WMAs is to transfer the management of WMA to local communities thus taking care of the corridor, migration routes, and buffer zones as an attempt to ensure material benefits to all parts to be involved in the management of these areas. The policy also mentions the human – wildlife conflicts solving strategies.

These strategies include involvement of stakeholders in controlling the dangerous and ruinous animal and giving assistance to the local communities. For the purposes of this study, the policy viewpoint of involving and effecting community-based conservation is of interest.

With an attempt to examine, local people perceived benefits and costs as a result of their living on the edges of the wildlife corridor that forms the SNTFCA, it will be important to see how management of the corridor has lived to the policy's expectation of ensuring that wildlife conservation competes with other forms of land use through realisation of the benefits of foregoing large prices of land for wildlife conservation in favour of other uses like agriculture and pastoralism.

4.2.2 The WMAs approach in Tanzania

According to the Wildlife Policy of Tanzania (1998), the establishment of a Wildlife Management Area in Tanzania requires participating villages to develop a Land Use Plan with areas designated for specific uses. In the event that land from more than one village covers a single WMA, a Joint Village Land Use Plan is developed. The actual land use planning process is conducted by the Village Assemblies of the corresponding villages with assistance from a multi - sectoral team of the District Offices. The village then forms a Community Based Organisation (CBO), officially registers it, and submits an application for "Authorised Association Status" to the Director of the National Wildlife Division. In the actual land planning process villagers designate and quantify areas for the categories: (a) Wildlife Management (Conservation); (b) Village Forest; (c) Agriculture and Livestock Grazing; (d) Residential; (e) Reforestation; (f) and/or any other area-category the concerned village wishes to designate. Land Use Plans typically cover a period of up to 15 years. Land use allocations give due consideration to village expansion (Schuerholz and Baldus 2007). Once a CBO has been granted the status of "Authorised Association (AA)", it is allocated user rights to wildlife occurring within the WMA. The user rights can include a quota for "bush meat" (community consumption), trophy hunting, non-consumptive tourism, and live animal capture for resold for stocking purposes. Conditional resource utilisation requiring licenses from the responsible authorities include forest products, honey collection from wild bees and fish resources. The study finds it important to review the management processes of the WMAs in Tanzania, as they are the areas that attract foreign investment and international conservation NGOs with different interests.

The experiences about WMAs as a conservation approach in Tanzania helps the study by identifying who is involved in conservation, the mechanisms they use and how they affect the distribution of costs and benefits. In relation to the SNTFCA, it is the network of WMAs forms the wildlife corridor referred to in this study (Figure 3).

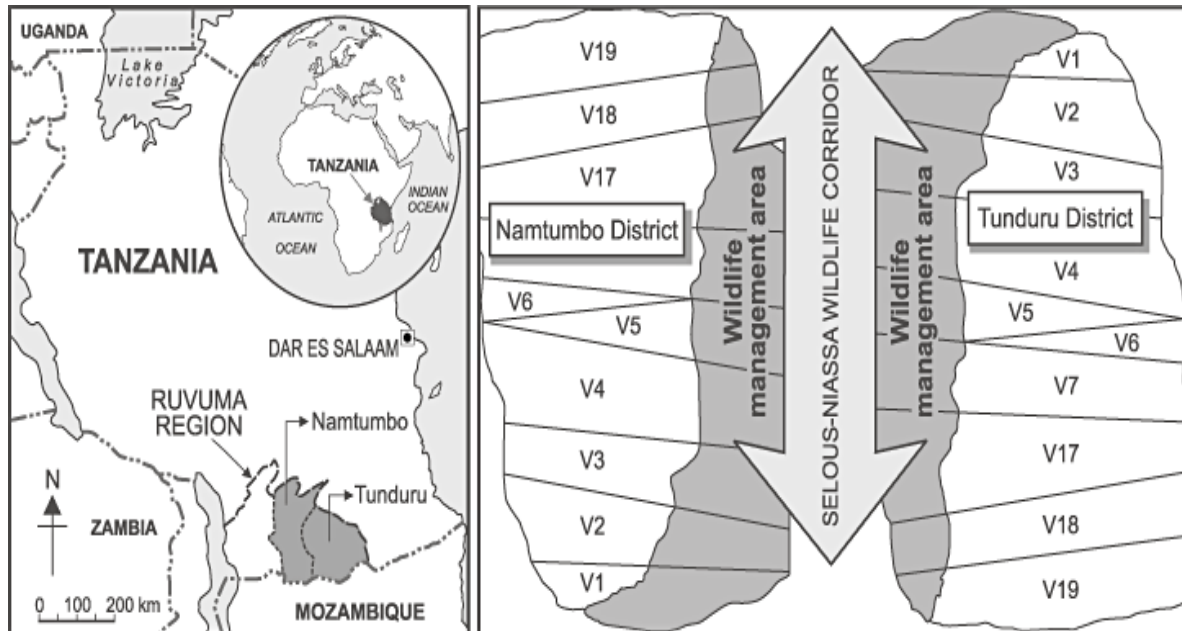


Figure 4: The Selous - Niassa Wildlife Corridor in Tanzania

Source: Ramutsindela & Noe (2012)

4.3 TFCAs Formation

4.3.1 The conservation phases

I treat this study about establishing local people perceived benefits and costs as a result of their living on the edges of the corridor that forms the SNTFCA as a form of a conservation strategy that comes with a discourse of benefiting local people are directly affected by leaving a space for these areas to be formed. From such thinking, I find it important to highlight the phases of conservation in an attempt to trace the roots of the discourses of conservation in the world. I do this because I link TFCAs formation as manifestation of a neoliberal approaches in conservation industry and I find it important to trace its history. According to Wilshusen, Brechin et al. (2002) explains three main phases of conservation industry name: fortress conservation, co-management conservation and neoliberal conservation.

Wilshusen *et al.* (2002) also argues that the three categories in this classification scheme are, of course, ideal types. They are, in themselves, categories that encompass high levels of historical, geographical, and institutional variability whereas Adams and Hutton (2007) argues that the historiography of conservation is context dependent, as are the political forms and ideologies that have dominated public policy and the production of science in general.

4.3.1.1 Fortress conservation

Fortress conservation is characterized by an exclusionary approach: it has often resulted in evictions of local inhabitants. It also focuses part of its managerial efforts on protecting and defending its borders from outsiders. Brockington (2002) explain that more often than not, the managerial body does not share jurisdiction with locals or local institutions still about fortress conservation, Wilshusen *et al.* (2002) claim that it is being implemented, and its adequacy is often questioned. In Tanzania, the formation of national parks and at large other forms of conservation areas like game reserves and even WMAs encompasses more or less of exclusionary approach were according to the policy local people must be well informed before leaving a space for formation of these areas but in contrary most of the time demarcation of borders uses and are state supported and force is used (Neumann, 1992 & Neumann 1997). Adams and Hutton (2007) argues that it is the inefficiencies of the fortress model that have pushed the conservationist movement (and its public and private bureaucracy) to rethink the paradigm, due to continued local resistance and accusations of environmental injustice that give rise to the another phase of conservation by involving local communities (co-managed conservation) as explained below.

4.3.1.2 Co-managed conservation

Vaccaro *et al* (2013) argues that at some point many contesting voices started to claim what became obvious: imposed conservation resulted in extensive environmental injustices associated with the violation of traditional local rights to land and resources. Imposition often led to local opposition and attacks against outsider governance, and even against the natural assets themselves.

Guha (2000) explains that this kind of opposition appears to be part of wider social movements, especially in the third world and that there seems to be a convergence between; postcolonial independence struggles that spurred demands for more political and economic recognition, inclusion, and empowerment of non-Western actors, giving birth to participatory approaches to development as also argued by Escobar (1995); the recognition of the role local communities have had in the management (or even creation) of valuable environments as argued by Toledo *et al* (2003) and the recognition that policies had different impacts of different intensity on diverse communities and on different types of social actors inside these communities as argued by Bailey and Bryant (1997). It is from such a platform where Agrawal (2005) argues that co-management phase of conservation industry acknowledges internal heterogeneity of the communities affected by conservation and development projects has led to the analysis of the consequences for different groups of individuals, depending on their identities or positionality. Subaltern groups, because of their productive choices, gender, or social standing, are also part of local communities, have strong local relationships with the natural environment, and often endure the worst consequences stemming from the sudden and radical changes brought about by conservation policies. West (2006) explains that in the 1970s, the political claims of the newly independent countries of the third world and the idea of sustainable development were introduced into the conservationist agenda where conservation proper became enshrined in conservation-as-development projects. Vaccaro *et al.*, (2013) argues that this interaction resulted in a generalized change in the discourse and practice of conservationist ideology concerning the acceptance of human use and habitation inside protected areas. Igoe and Croucher (2007) explains that in terms of governance, this meant the devolution of jurisdiction from central authorities to local partners, partially through co-management, or fully as community-based conservation. Vaccaro *et al* (2013) concludes that different conservationist organizations adopted some elements of this co-management framework and developed their own programs. Community Based Natural Resource Management (CBNRM) programs sustained by WWF and other Western nongovernmental agencies and governments proliferated as a way to connect local. Neumann (1992; 1997) also Nelson & Makko (2005) explained about resistance of local people to foreign dominations in natural resources in Northern Tanzania (Serengeti and Loliondo).

These resistances were against exclusion from their lands and conflicts for accessing areas for grazing to the situation that probably they are results of violation of local people rights to access and use their lands. The CBNRM approach has also been applied in conservation of natural resources in Tanzania (Neumann 1992; Neumann 1997; Marko & Makko, 2005) and the great challenges with the CBNRM is that it treats communities as a single entity. In fact, it is not a reality that whole communities included in CBNRM stands for benefit. Often it is just few members from the communities and especially leaders who benefits by low margins.

4.3.1.3 Neoliberal conservation

The third phase of conservation industry is the neoliberal conservation. McCarthy and Prudham (2004) explains that conservation policies require resources to function and, with a few exceptions, parks, parklands and protected areas usually do not generate enough income to sustain their protection or continued habitation and these areas need continuous inputs from governments or external institutions to endure over time. These financial and legitimacy transfers have often been negotiated without involving local communities which are directly affected following their living on the edges of the set aside areas for conservation. Igoe and Croucher (2007) explains that neoliberal conservation, is occurring hand in hand with a general neoliberalisation of the societies that traditionally funded conservation across the world and that privatization is happening in some places also accompanied with dismantling of the conservationist public administration and its policies. Hardin (2011) explains that in the current phase of conservation, protected nature has become a commodity to be sold by governments, multinational organizations, or companies on international markets; as political or economic leverage. According to Vaccaro *et al.*, (2013) this phase of conservation is defined by the managerial and ideological structure that controls the policy, and focuses mostly on the discourses that articulate it as a more or less permanent unequal institutional performance as differentiated with power. This inequality inherent to conservation policies resulted in conservation contradictions accompanied with local communities' exclusion by local and external stakeholders in such processes where the state in collaboration with international NGOs renders local communities voices silent when implementing their motives.

This type of conservation protects nature, it often leaves local rural populations without access to resources they are used to, and sometimes-local people are relocated under promises to benefit where also the benefits are not truly delivered. It is also now, where this study will establish local people perceived benefits and costs as a result of their living on the edges of the wildlife corridor that forms the SNTFCA from the insights of the roles of NGOs in conservation and how they affects local people in formation of TFCAs.

4.3.2 The power behind TFCAs formation

Robbins (2004) argue that TFCAs formation is as a result of the changes in global politics brought about by globalisation that have affected the ways that environmental problems are increasingly subject to transnational forms of management. Robins (2004) further explains that the increasing phenomenon of global governance is an important new development for environmental management. Robins continues that in particular, the Trans boundary nature of environmental problems has meant that they have become an important arena for what might be termed global environmental governance where forests, wildlife, climate change, pollution, amongst other things, are increasingly subject to international forms of management (including international conventions). TFCAs formation demonstrates that global conservation schemes are highly political interventions that produce new forms of conflict centred on control of and access to natural resources.

Furthermore, on who is behind TFCAs formation, Duffy (2006) argues that Trans Frontier Conservation Areas (TFCAs) have become a new and important theme in environmental management. Since ecosystems cross human created national borders, it seems clear that good ecosystem management and conservation requires co-operation between neighbouring states. As such, TFCAs have become an important dimension of environmental protection, and received enthusiastic backing from a number of global actors ranging from the World Bank to environmental NGOs.

4.4 TFCAs in Sub-Saharan Africa

Trans-frontier Conservation Areas (TFCA) are relatively large areas, straddling frontiers between two or more countries and cover large-scale natural systems encompassing one or more protected areas. TFCAs involve a unique level of international co-operation between the participating countries, particularly issues related to the opening of international boundaries and within each region, TFCAs formations are specifically meant to serve ecological, socio-economical and governance objectives. Guided by three main objectives i.e. ecological, socio-economical and governance (RETOSA 2013)

Ecologically, TFCAs aims to re- establish key ecological functions previously disrupted by limitations of opposing land uses and management principles across the borders; re-establish seasonal migration routes for wildlife; and support resources management by promoting basin-wide approaches to the management of international rivers and wetlands. Socio-economically TFCAs are meant to promote growth of the tourism sector specifically cross-border tourism; increase the economies of scale for economic activities such as eco-tourism, and natural resource based enterprises and promote cultural linkages between countries in the region and people across borders by kinship, language, and culture and in terms of governance, TFCAs strengthen regional integration and cooperation.

The concept of creating trans-frontier conservation areas (TFCAs) is recognised in Sub-Saharan Africa as important tool in promoting the conservation of biodiversity and endangered ecosystems. In Sub-Saharan Africa, TFCAs compliment the SADC principles related to alleviation of poverty and regional economic integration. The SADC Member States have demonstrated their commitment to the conservation of biodiversity by signing the Protocol on Wildlife Conservation and Law Enforcement in 1999 and ratifying it at the end of 2003 (Community 1999). Article 4(f) of this Protocol commits the SADC Member States to “promote the conservation of the shared wildlife resources through the establishment of trans-frontier conservation areas”. In this Protocol, a TFCA is defined as the area or component of a large ecological region that straddles the boundaries of two or more countries encompassing one or more protected areas as well as multiple resources use areas. At present, there are about twenty (20) existing and potential TFCAs within the SADC region (Figure 5).

The development of these TFCAs is at different stages with a few established with Treaties, a few more with Memoranda of Understanding to facilitate their establishment being negotiated whereas the consultations to establish the other TFCAs are still to be initiated. The continued increase in the number of TFCAs is a clear indication of the interest, buy-in, and social acceptance of TFCAs as nodes for rural development. The SADC has also accepted the TFCA principle as an outreach programme to include the rural areas in the deeper regional integration agenda in its drive to meet the Millennium Development Goals in Southern Africa (Peluso and Watts 2001). The SNTFCA MoU was signed in 2007 where the Regional Administrations and local Governments of Mtwara and Ruvuma of Tanzania and the Provincial Governments of Cabo Delgado and Niassa of Mozambique signed a MoU on cross-border cooperation to promote regional economic growth, development, the traditions of good neighborliness, and a peaceful environment. Thus, cross-border conservation was officially recognized and identified as one of the key areas for cooperation. Activities on the ground include the exchange and mutual support of research and of anti-poaching information, parallel patrols, and agreements about the utilization of natural resources (<http://www.retosa.co.za/regional-initiatives/trans-frontier-conservation-area>). The figure below shows TFCAs in Sub-Saharan Africa in which number twelve (12) represents the SNTFCA.



Figure 5: The existing and potential TFCAs in Sub-Saharan Africa

Source: RETOSA (2013)

This study aimed at examining perceived costs and benefits of local people as a result of their involvement in SNTFCA and it is a supposition that the establishment of the wildlife corridor would benefit rather than cost local people who live around its edges. This supposition is subject to organisation and management of TFCAs where for example Andersson *et al.*, (2012) caution that TFCAs are part of an increasingly interconnected, globalised world where that to be sure it not that all TFCAs objectives are met. Cumming (2008) & Andersson *et al.*, (2012) are critical on the TFCAs objectives when they explain that: Firstly, many of the TFCAs are donor funded oriented, most of the time inadequately funded and in addition, ecologically effective and functional corridor are yet to be established between the core-protected areas of TFCAs. They further explain that, some protected areas remains settled by people with claims on livelihood support on the protected areas and that explicit objectives for the edges of core protected area are yet to be formulated and that the synchronisation of national policies for resource conservation in different TFCA countries is an important step.

4.5 Incorporating local people in natural resources management: Experiences from Kruger National Park and the Great Limpopo TFCA

Zbicz (2003) on her work on the attempts to impose, regional conservation on local communities describes that, the top down approach without local participation are doomed to failure. She argues that sustainability of conservation projects depends on inclusion of at least key stakeholders and development of a supportive constituency. She continues that, while international organisations play crucial role in educating, equipping and facilitating conservation they cannot impose it forcefully. She elucidates that, sustained success depends on a day-to-day involvement and efforts of those on the local level who must do the interaction. (Zbicz 2003) further cautions that, although local community involvement has proven to be instrumental to success and to the sustainability of both development and conservation, it has not been easy, nor has it guaranteed success.

Stoll-Kleemann (2005) in the same idea of incorporating local people in resources management describes that there is a management shift on biodiversity, evolving from a top-down and conservation by fences concept implemented by law enforcement to a collaborative, flexible, stakeholder-oriented process. The former suggests that, rules and corresponding enforcement arrangements are indispensable; the latter proposes that protected-area management should consider local concerns and seek local ownership and support. Stoll-Kleemann (2005) continues that, biodiversity governance needs to be adapted to local conditions but aligned with global, regional, and national frameworks. That, in governance terms, this approach calls for vertical linkages adapted to local conditions; subsidiary of rights; responsibility and accountability at all levels; mutual supportiveness between different levels with minimal transaction costs; and horizontal supportiveness and further synergies between, for example, conservation efforts and poverty eradication strategies. Also that, however, in this particular arena there are many powerful actors, such as non-governmental organizations with environment and development goals, indigenous peoples' organizations, bi- or multilateral development organizations, transnational corporations, bodies of international and national law, scientific and local expert groups, and professional associations each one of them struggling for their own interests.

Spierenburg *et al* (2008) explain that a group of residents known as Malukele community from South Africa managed to reclaim the part of Kruger National Park they had been evicted from in 1960s. They explain that such claims greatly strengthened the bargaining power of local people relative to that of the conservation authorities, increasing their chances of extracting benefits from the parts of the park included in the TFCA some of which were established by the way of forced removals. Among the steps taken by the Malukele community after negotiations and decisions involved an establishment of a highly profitable hunting camp on their land, which they used for a number of a limited number of high profile hunts per year and an agreement to develop a game lodge called The Outpost on the western section of their land.

An experience from Mozambique in the Great Limpopo TFCA formation as explained by Spierenburg *et al* (2008) is useful in this study in the following ways. They elucidate that about 7000 residents living in the area relocated from the area for the reason that removal of villages would render the area more attractive to private tour operators. They clarify that due to the formation of the park, local government institutions have been disabled rather than empowered; their role in negotiating about the compensation residents are to receive for the inevitable relocation are lowered. Further, it is made clear from their study that donors funding the park including the German Development Bank insisted that no forced relocation will take place and that communities were to be consulted but in practice measures directly affecting the residents were implemented without consulting the residents. Spierenburg *et al* (2008) continues that residents were not consulted or even adequately informed about the change of the status of the area. Frustrations of the local people as affirmed by Spierenburg *et al* (2008) where that authorities claimed that resettlement is not forced, but that is not true. Local people claimed that they were forced because they no longer allowed living our lives, as before, and that they could no longer cultivate where they wanted, and they could no longer take their cattle out for grazing. From the study, local people claimed that they agreed to move but they did not do so freely”⁷. This piece of expression is seen by the researcher as one way of local communities’ response towards the costs and benefits of the formation of TFCAs and this may be a platform in establishing the situation in the SNTFCA.

⁷ A respondent in the study conducted Spierenburg *et al* ., (2008) in Great Limpopo TFCA

The study aimed at examining local peoples' perceived costs and benefits on local people resulting from their living on the edges of the wildlife corridor forming the SNTFCA by looking at who is involved, their interests behind and the mechanisms in use to get local people aboard. In relevance to the study, the reviewed literature about TFCAs in Southern Africa and the importance of involving local people brings in with lessons that helped to frame the study in the following ways: That, in conservation practices, there will always be a range of global actors⁸ with different interests where that their motives for conservation relies on how best they can involve local communities. In addition, that mostly is it the interests and decisions of global actors that surpasses and probably affect decisions regarding access and use of resources in the protected areas and that distribution of costs and benefits on local people is often determined by global actors.

⁸ The term global actors is used in this context to refer to international conservation NGOs and institutions

5. THE STUDY EMPIRICAL FINDINGS AND DISCUSSIONS

This chapter brings along with the findings and discussions on the study aimed at examining local peoples' perceived costs and benefits as a result of their involvement in the establishment and the management of the wildlife corridor linking Selous – Niassa Trans-Frontier Conservation Area. This chapter organises the study findings with regard to 3 selected political ecology aspects to include: access and management of resources in the wildlife corridor; participation and decision making regarding resource use issues and management and lastly benefits and costs distribution provisions to local people in Likuyusekamaganga village, the village that her residents released part of their land to form the SNTFCA.

5.1 Analysis of access and management of resources in the wildlife corridor

The study establishes that there are four groups of actors namely the Government with the three arms i.e. the Wildlife and Tourism Divisions and the Game Officers Unit, the SADC, the international non-governmental conservation organisations (INGOs), and the private and business actors in tourism and mining companies. The study categorises actors using the balance from international to local actors as suggested by Andersson *et al.*, (2012), who holds that opportunities for people living on the edges of TFCAs are influenced by a multitude of factors from the global to local level. The study establishes that the identified actors (Table 1) have different interests (Table 2). The study establishes that there are 8 international conservation NGOs in collaboration with the State that through their conservation interest determine the access and management of resources in the wildlife corridor. The study establishes that local people in Likuyusekamaganga village like other rural areas in Tanzania are very poor and that poverty attracted them to always try to access the protected wildlife corridor for activities like small scale agriculture, domestic fuel in form of firewood and charcoal collection and these poses a challenge for the state and conservation NGOs on protecting the corridor from human resource destroying human-oriented activities⁹. The study found that introduction of mining activities has also led to a conservation dispute between the state, local people, international conservation NGOs with regard to the wildlife corridor

⁹ Information obtained from one-on-one interview with the representative from the Game Unit

conservation and resource access and use. The conservation dispute situations in the wildlife corridor as discussed below (Section 5.1.1 & 5.1.2).

Table 1: Categories of identified actors in the wildlife corridor

S/N	Category	Name of the actor (s)
1	International	Eight (8) international conservation NGOs: United Nations Development Programme (UNDP), The Deutsche Gesellschaft fuer Technische Zusammenarbeit - International Services (GTZ), Kreditanstalt für Wiederaufbau/German Government-owned Development Bank (KfW), World Wide Fund for Nature (WWF), WATU na WANYAMA, Association for Development of Protected Areas (ADAP), PAMS Foundation, Council for Game and Wildlife Conservation (CIC) and 3 mining companies: (Mantra (Tz) Ltd from Canada, Frontier Resources Ltd from Australia, Uranex (Tz) Ltd also from Australia
2	Regional	SADC*
3	National	The Tanzanian Government (Wildlife Department and the Tourism Division)
4	Local	Local people and Game Frontiers of Tanzania (the only tourism company in the Mbarang'andu WMA).

Source: Field Data, 2012

SADC is a regional actor in TFCAs formation and it is the SADC that made it possible for the formation of TFCAs through signing of the Protocol for Wildlife Conservation and Law Enforcement, which has been signed by all SADC Member States. member states are committed to promote the conservation of shared wildlife resources through the establishment of Trans Frontier Conservation Areas. The SNTFCA is also a manifestation of the SADC Protocol. There is also the SADC Regional Biodiversity Strategy known as the Trans-Boundary Natural Resource Management (TBNRM) Programmes that facilitates the management of natural resources for the benefit of all parties concerned. The SADC Secretariat is assigned a prominent role in the Strategy's implementation (RETOSA 2013)

Table 2: Interests of identified actors

S/N	Identified interest	Principal actor (s) in implementation of the interest
1	Conservation	UNDP, GTZ, KfW on the project The SNWPC, WWF, WATU na WANYAMA, ADAP, PAMS Foundation, Council for Game and Wildlife Conservation (CIC)
2	Mining	Mantra (Tz) Ltd from Canada, Frontier Resources Ltd from Australia, Uranex (Tz) Ltd also from Australia
3	Tourism Business	Game Frontiers of Tanzania
4	Livelihood	Local people

Source: Field Data, 2012

5.1.1 The dispute between conservation (International NGOs) versus agriculture (local people)

The study established that the establishment of the USHOROBA and now under the KfW in support of the Selous – Niassa Wildlife Corridor Protection project (SNWCP) has resulted into restricting local people from accessing the corridor for traditional livelihood making activities like agriculture. The study institute that conservation activities are now facing a danger of encroachments because local people see the corridor as an agriculture asset¹⁰. Local people claim that they are now restricted from accessing the wildlife corridor areas that they consider very fertile for rice growing¹¹. Local people claim that these areas are very fertile; they would need no fertilisers to guarantee rice harvests. The study established that the main conservation challenge is that people were going back forcefully to the wildlife corridor for rice growing something that they consider more substantial for their lives. This situation has increased a tension where local people forcefully encroach the fertile areas for agriculture the act that goes against the agreement of leaving the areas for setting aside the corridor¹².

¹⁰ Information obtained during an interview with the SNWPC representative

¹¹ Information obtained from one-on-one interview with local people

¹² Information obtained during an interview with SNWCP representative

The study establishes that the formation of the wildlife corridor also known as USHOROBA in Swahili language just like TFCA formation reflects and rotates around the role of state and the different levels of government i.e. village, district and the state and non-governmental organisations (Ostrom 1990) where ambiguities in access rights, resources use, and exclusion of legitimate local users of the resources necessarily result into conflicts between local people and other actors (INGOs) in the wildlife corridor management. For the case of Likuyusekamaganga village in the SNTFCA study establishes that, for local people accessing fertile land for agriculture is more important and more substantial than waiting for the promises which most of the time come in form of infrastructure improvement and development in form of office constructions, village road construction¹³ etc. Granfelt (1999) argues that conflicts exist and in many cases because of interest of the actors involved in resource management. In this case, we have seen a conservation interest (State & NGOs) conflicting with livelihood support for local people.

With regard to the presence of eight (8) international NGOs in the TFCA and the role of the state in determining resource access and use, the study reveals that, the Selous – Niassa Wildlife Corridor Protection project (SNWCP) funded by KfW is the main driver in managing the wildlife corridor and that it would be difficult to manage the wildlife corridor without the role played by NGOs¹⁴. The SNWCP is the KfW funded project that is responsible for all conservation activities in collaboration with the State. The government distinguishes the influence of these NGOs by conceding that it would be difficult for the corridor to exist without these NGOs¹⁵. On the role of NGOs in conservation Levine (2002) explains that the role of NGOs raises questions on how much these institutions are helping local people, by arguing that the involvement of NGOs is simply a new mechanism for the reproduction of inequality or external control .

¹³ Information obtained from a focus group discussion with the village council

¹⁴ Information obtained during an interview with the Government representative

¹⁵ Information obtained during an interview with the SNWCP representative

I argue in line with Levine (2002) that if TFCA as other community-based conservation programs real aim to meet their stated goals, they could help to give local people increased control over their own resources, as well as provide them with a new source of income rather than promising them that they would benefit. The ambiguities related to benefits and costs distribution are discussed in section 5.3 below. Still on issues related to access and use of resources while reflecting on the role of the state and how NGOs decides for local people and the state itself Duffy (2006) elaborates that the role and power of the state on managing TFCAs in Southern Africa is shifting. Duffy (2006) explains that TFCAs in Southern Africa clearly involve partnerships and networks of global, local, public and private actors that engage with the state, where the state is defined as one interest group amongst many others and may not even be the most important actor. Duffy continues that this is a good example of the politics of global environmental governance and how it is marked by the proliferation of forms of power, control, and authority that increasingly lie outside national governments. Duffy (2006) also argues that TFCAs can be regarded as a means by which global actors can recentralise control over resources and people from the global level and concentrate power in the hands of a narrow network of international NGOs, international financial institutions, global consultants on tourism/community conservation and bilateral donors as also supported by Porter and Brown (1991) that, it is international organisations help to set the global environmental agenda, initiate and mediate the process of regime formation and cooperate with developing countries on projects and programs directly affecting the environment. In this case we have seen how KfW through the Selous – Niassa Wildlife Corridor Protection project (SNWCP) in collaboration with the state determines and limits local people from accessing the wildlife corridor land for rice growing in the name of conservation. I in this juncture insist that local people threatened to go back to the corridor because they did not realise the benefits of conserving the corridor.

5.1.2 The dispute between conservation and Livelihood support versus mining

The introduction of mining activities in the area (Noe, 2013) brought conflicts over land use. The study established that the very UNESCO that describes the Game Reserve as an immense sanctuary of 50,000 km² accepted a boundary change of 200 km² from the Reserve to enable mining of uranium in the conservation area for supplying nuclear power plants¹⁶. The on-going mining is situated in the wildlife corridor between Tanzania and Mozambique. The conflict about allowing uranium mining to take place took an international shape where Environmental groups started a campaign on 9th of August 2012 where UNESCO was accused of failure and irresponsibility. The campaign accused UNESCO approval of uranium mining to have being influenced by corporate and lobby interests. Mining activities were considered dangerous and rejected by ADAP¹⁷ and local people not only that it denies local people from accessing land for bee keeping but also the unforeseen pollution to be brought by mining activities. The planned operating time of ten years could lead to the creation of 60 million tons of highly poisonous waste¹⁸. The campaign motto claimed that there were no safe method existed to avoid contamination of surface and ground water during uranium mining and that it remained unclear whether the wind will spread radioactive dust into the Reserve and contaminate wide areas.

At the national level, the conflict also made headlines on newspapers. A local newspaper Daily News (2012) published an article on the approved uranium activities from a Legal and Human Rights Centre on the effects of uranium mining and what ought to be done before starting uranium mining. The article with a heading “NGO calls for halt of uranium mining projects in Tanzania until public is educated on hazards” presenting a view from the Legal and Human Rights Centre an NGO based in Dar es Salaam Tanzania went on air on 28/11/2012.

¹⁶ Information obtained from www.rainforest-rescue.org/mailalert/883/unesco-sacrifices-wildlife-preserve-for-uranium-mine

¹⁷ The Association for Development of Protected Areas (ADAP) is a Swiss based NGO that came to the corridor to implement its project in the Northern part of the USHOROBA with financial assistance from the Geneva Federation for Cooperation

¹⁸ Information obtained from www.rainforest-rescue.org/mailalert/883/unesco-sacrifices-wildlife-preserve-for-uranium-mine

The article claimed that Tanzania should stop implementation of uranium mining projects until the public is well sensitized and educated on its serious side effects to human and environments and also that a clear policy, regulations and legislation on the same are in place. The article had an aim of persuading the government not to rush into uranium mining without gathering enough local expertise on how to go about hazards that are likely to cause countless effects and massive losses to people and environment. Other areas that were proposed to be considered by the government before the uranium mining according to the article was the fact that a lot of water, power and land will be needed for the major undertaking and whether the government was ready to make sure those facilities are readily available without causing any harm. The study established that campaigns to stop uranium never succeeded, and it is now taking place.

I consider and examine this dispute in relation to ambiguities of access and resource use in the wildlife corridor from the fact that local people supported by ADAP needed areas for bee keeping while uranium-mining activities need vast areas for uranium mining. This dispute encompasses local people, ADAP as an NGO that supported local people livelihoods by helping local people to develop alternative income generation activities in the Mbarangandu WMA through development of modern beekeeping and agroforestry practices to contribute to the reduction of illegal use of natural resources and destructive forest fires. ADAP does these through training programmes on beekeeping, assistance in marketing of bee products, purchase of office equipment's, motorcycles¹⁹ etc. While ADAP and local needed an environment for beekeeping activities, mining activities in form of exploration would destroy the very areas needed for beekeeping. The study established that ADAP was against uranium mining as that the dangers of uranium mining would interfere with the quality of beekeeping products to be sold. The NGO threatened to pull out. To local people, accessing the services of ADAP and accessing the land for beekeeping is more important than mining that already through international movements had painted a negative perception²⁰.

¹⁹ Information obtained from a focus group discussion with village natural resource conservation committee

²⁰ Information obtained from a one-on-one interview with local people

In relation to this, the approval of mining activities to take place implicate that local people would again lose access to the land that ADAP had started initiating and installing beehives for honey production.

5.2 Analysis of participation and decision making regarding resource use and management

The findings about participation and decision making regarding resource use and management in the wildlife corridor as second aspect of the political ecology in this study is discussed in this section. According to the study findings, issues that were mentioned to have complexities regarding participation and decisions making are related to: the processes of selecting investors and signing of the investment contract between the tourism investor and local people; funds reception and distribution and processes of approving kind of conservation and tourism activities to take place in the corridor.

5.2.1 Complexities in selecting investors and contract signings

The study establishes that local people are less informed about the processes of selecting tourism investor and at large, they are not exposed to processes of selecting and signing of contracts. Local people claim that things are now being imposed on them and that they just receive summaries of what takes place without explanations²¹. I link this finding with Adams and Hutton (2007) and McCarthy (2002) who argues that neoliberal approaches sometimes have no concern on rural, often agrarian, third world situations when implementing their projects. Local people claim that, *“We are the owners of the resources here. We have many times requested to meet the investor in person unsuccessfully. Villagers do not know him. There are many contradictions. For example, we are never invited and we do not know how the process of the contracts between the WMA and the investor takes place. We know that we do benefit a little but we would like to have and participate more in decision-making. The management never supplies the real copies for our use. We normally receive the summaries of what took place and that the investor does not want to talk the villagers. He just talks to the WMA management, people at the District Council and other members at the district level”*. (Respondents in one of the focus group discussion with village natural resource

²¹ Information obtained from a focus group discussion with the village council

conservation committee). The contemporary setting about choosing and signing of contracts is that local people are represented by the WMA management to meet potential investors and it is the very management that signs contracts with the chosen investors. Local people revealed frustrations that they just see annual reports on the noticeboards without explanation. I apprehend that the processes and the ways into which local people are supposed to benefit must be not a hidden agenda but rather open to them. The study revealed that local people did not know and they were not informed about how only one the investor was given an authority to invest in the only two blocks in the WMA. Local people claimed that, *“the investor does not want to talk to the villagers. He just talks to the WMA management²² and members from the district level”*. Local people insist that they would want to talk to him in personal for the reasons that they are the owners of the resources²³. When asked why not sending their opinions through their leaders, local people revealed that possibly their leaders are colluding with the investor to make things go well on their side. The study finds this to be a very strong accusation. This finding draws attention because they are the very local people who make up the village council and the village natural resources conservation committee. On the other hand, the WMA management and the tourism investor claims that things were going on all well and that there were assured participation from local people through their village natural resources conservation committees²⁴. On the decision making processes regarding resource use and management Perkins (2005) comes up and questions the decision making processes by asking important questions that, when we say public participation do we really mean enhanced voice and access for a certain segment of the public or just a segment of the public claiming that things are under control? In this case, they are the WMA management and the tourism investor who claims that things were going on well but local people affirms that their own WMA management was bypassing them.

²² The WMA management is made up of leaders from local people representing the seven villagers in the WMA

²³ Information obtained during focus group discussion with local people natural resources conservation committee.

²⁴ Information obtained from one-on-interview with WMA management

A claim by local people that the WMA management colludes with the district management to make decisions by not involving and encompassing local people voices backs the study to substantiate a claim by Vig and Axelrod (1999) that in neoliberal conditions NGOs selectively work in conservation areas to include; working with elected officials, bureaucrats and employees of corporations, raising and spending money, campaigning and organizing public protests, promoting media coverage of environmental issues, information exchange, undertaking research, acquiring and managing property and generating local community involvement in environmental protection.

5.2.2 Complexities in revenue sharing arrangements

The study reveals that local people do appreciate the distribution of revenues got from tourism activities in the WMA but they argue on how funds distribution by claiming that, *“Mining companies do fund the village development programmes, but it is never transparent. For example, last year they gave us Tshs. 1,500,000²⁵ from the friends of WMA. We do not know how much is given by the organisation. We just receive the money. It is also not enough. This leads to queries from other villagers”*. (A respondent in one of the focus group discussions with the village council. The study establishes these contradictions are possibly a result local people not being involved in decision-making processes and proper communication between the WMA management and local people about funds use and distribution. It is a logical presumption that if there are complex relationships between actors then these possibly relates to decision-making processes between and among actors. The study establishes that local people feel neglected in the processes of decision-making. Local people reveal this when they say that, *“They don’t know the difficulties we face on the ground. If you are here to listen to us also take a note and tell them about our problems. We just need the collaboration and communication between the WMA and village leaders and committees to be improved. It would be very much helpful in this case”* (A respondent in one of the focus group discussions with local people village council). There is also a village natural resource conservation committee made of five (5) members²⁶ meant to represent village members in meetings at the WMA level management meetings.

²⁵ Tanzanian shillings 1,500,000 is equivalent to 750 euros (Exchange rate: 1 euro = Tshs.2000)

²⁶ This information was retrieved on the guidelines of managing natural resources in the wildlife corridor.

I consider representation through the village natural resource conservation committee to a be channel of public participation as proposed by Perkins (2005). The finding that local people feel not being listened raised a necessity to examine what would be the reason for this if the committee existed. Local people themselves realise and agree on their inadequate capacity of their committee when they say that, *“Most of people here are not educated, they represent us in meetings, but they have no say”* (A respondent in one of the focus group discussions with local people village council). This stance helps the study to argue that and supplement on Perkins (2005) conception on public participation that it is not all about having people to represent the public rather the capacity of representative matters. I can imagine that local people are possibly only listeners in the meetings with government officials, expatriates from NGOs, and the business actors who probably have an advantage skill in negotiating skills.

5.2.3 Complexities in the processes of approving activities in the wildlife corridor

The study also established a dispute between local people and the State over allowing mining activities to take place in the corridor. The state and the tourism company agree that mining activity was approved by the state after expert consultation and that it was for the benefits of the nation²⁷. In relation to this finding, the power of NGOs in collaboration with the State was revealed. A study by Noe (2013) reveals the conflicts over land use in the Mbarangádu WMA following the introduction of uranium mining. She explains that WMAs have served to release lands for different kinds of private sector investment in nature based and extractive industries. This study found that local people knew how important conservation was and the possible impacts of uranium mining and they resisted but ultimately failed. The ruling of the government on allowing mining activities to take place reflects on what I describe to be the less power local people have on the decision making regarding the uses of land and resources in the corridor. Local people concede that when the government decides then nothing else can be done when they affirm that, *“... We saw them as enemies and tried to resist but the government overpowered that and now uranium exploration and mining is taking place. We had to retreat and look for negotiations.....”* (A respondent from the on-one-on interview with the WMA management). Local people were against uranium mining for the reason that mining activities through mining activities the nature and the resources they had conserved

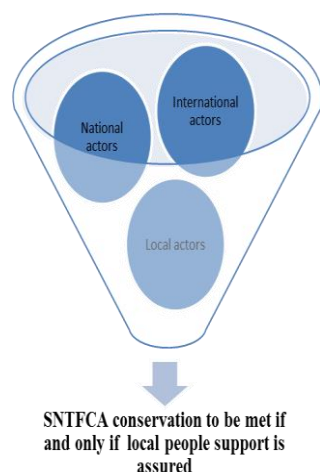
²⁷ Information obtained from one-on-one interview with the representative from the Game Unit.

for years will be swept away by cutting down of trees and digging the land for uranium. I link this finding with a notion in conservation activities there will (probably) always be state violence in making sure that the aimed goals are achieved. In this case, local people were not involved in the processes of allowing the uranium mining to take place. In other words, the state ruled for uranium mining to take place and resistances never succeeded.

5.3 Analysis of costs and benefits distribution issues in the wildlife corridor

The thinking behind the importance of making sure that local people are in support of TFCAs establishment and management is related and supported by Fabricius *et al.*, (2013) who highlight the importance of communities receiving equitable benefits from the use of their natural resources if they are to adopt a feeling of ownership or custodianship towards them. It is also known that environmental NGOs differ according to the means they use to achieve their objectives and that a distinction is commonly made among groups that they attempt to persuade, to bargain, and coerce as explained by Vig and Axelrod (1999) . The study establishes how different actors would all come together to get local on board towards conserving and protecting the corridor and its resources and at the same time ensuring that benefits of all sides included are compromised. The study findings (Figure 6) validates that the mechanisms in use. These mechanisms include; sensitization, education, sponsorship, training, funding and sharing revenues from tourism hunting.

A summary of the way actors work in attempts to meet SNTFCA objectives and largely to get local people aboard



Summary of mechanisms of actors

- **International actors:** Sensitization, education, sponsorship, training
- **National actors:** The Ministry of Natural Resources and Tourism (the facilitator): sensitization, education, training and revenue sharing
- **Local actors** defined in this case to include the mining companies and the tourism investor: Sharing benefits of mining, hunting tourism, funding, sponsorship, education, training

Figure 6: Mechanisms used by actors in the SNTFCA

Source: Study findings, 2012

In the following section, the study analyses how actors' mechanisms are applied. The section also analyses the benefits and costs distribution from the perspective of local people.

5.3.1 Analysis of the mechanisms in use

The study establishes that local people perceived benefits and costs is a reflection of mechanisms used by actors. These mechanisms are sensitization, education, sponsorship, and training, funding and sharing revenues from tourism hunting (Figure 6). The establishment of the WMA is accordance to the Wildlife Policy (1998) and in its implementation WMA borders are created and once established it becomes illegal for conduct of any other activity unless approved by relevant authorities. Allowed activities in WMAs include tourism hunting, camping whereas poaching and conduct of human activities like agriculture is prohibited within the set aside areas.

I link the measures to prohibit what is termed as illegal activities after WMAs and the wildlife corridor formation with the notion of modern conservation thoughts and strategies that are manifestations of modern era conservation. Haila (2012) argues that modern era conservation needs a consensus among conservationists and international conservation and that the famous ‘fences and fines’ approach may not prove successfully as argued by Songorwa (1999) especially when dealing with local people who see areas set aside as the only source of livelihood support. I argue in line with (Songorwa 1999) that measures to protect the set aside areas for conservation are designed not to offer sustainable livelihood alternatives to the local communities as they claim to be but rather they are meant to reduce their opposition to those protected areas. Vihemäki (2006) argues that the state agencies, community groups and other actors involved in the conservation and use of natural resources intervention in form of mechanisms like training, sensitization, funding and sponsorship in the implementation of participatory conservation by promoting development activities and/or sharing the responsibility over resource control does not make resource conservation a smooth and apolitical process. I also argue in line with Vihemäki (2006) that the mechanisms in use aims at making sure that NGOs interests are accepted and that are viable in the longer term by using discourses that conservation efforts recognise and address the problems of local people.

The study also links the argument that the mechanisms are meant to reduce local people opposition in line with Benjaminsen and Svarstad (2010) claim that Environmental conservation in Africa is predominantly presented by key actors in terms of a win – win discourse involving community participation and benefit sharing. Benjaminsen and Svarstad (2010) argues that international conservationists as well as African authorities have their interests served by a presentation of conservation as advantageous to local people. I link the mechanisms like education and training, sensitization of local people as a way to present that conservation is advantageous to local people. The extent to which the establishment of the wildlife corridor that forms the SNTFCA is a benefit or cost to local people is analysed in sections (5.3.2 & 5.3.3).

5.3.2 Analysis of established benefits

The study establishes the contemporary benefits as a result of the establishment and management of the wildlife corridor to include: the on-going construction of the new office building in the village, a tractor, a container used as an armoury (Figure 7, 8 and 9 respectively), and bursaries for sending orphans and children from poor families to school. The German organisation known as “WATU NA WANYAMA²⁸” sponsored the WMA a total of Tanzania shillings 3,000,000 (approximately 1,500 euros) the amount which was used to buy the container (Figure 10) which is now the storage room for food for village game scouts and armoury. The tourism hunting company (Game Frontiers of Tanzania) also bought a tractor of 70 horsepower (Figure 8) used for different purposes and among them are sending village game scouts for anti-poaching activities in the field during rainy seasons. Other benefits include education and training of village game scouts where every village is given a chance to release only fourteen (14) people to participate in the village game scouts teams involved in anti-poaching activities. The study also established that there were plans to construct water dams to cater for water scarcity as part the contribution from actors and conservation NGOs working in the corridor. I draw an attention these benefits were mentioned by the WMA management and they are subject to criticisms by local people who perceive them as not direct benefits to all people.

The study establishes that there is relatively smooth relation between the international conservation NGOs and the mining company under the platform which brings together all actors in the WMA called FRIENDS OF MBARANG’ANDU²⁹”. This platform claim to be in support of local people in different development initiatives. The support is in form of offering of funds, scholarship and revenue sharing from the activities they are involved in. In last year 2012, the Friends of Mbarangándu all together contributed a total of around 22,000 euros the amount that was equally distributed to the seven villages forming the WMA.

²⁸ Watu na wanyama are Swahili words meaning people and wildlife

²⁹ Friends of Mbarang’andu is a platform which brings together all actors in the WMA with a common goal of looking for local people support by collecting and distributing part of their earning to local people to local people.



Figure 7: The WMA new office and conference building



Figure 8: The tractor owned by the WMA



Figure 9: The WMA container and armoury room

Source: Photos (Figures 7, 8 & 9) were taken during field study, 2012

The role of non-state actors in conservation is as in the case of the wildlife corridor that forms the SNTFCA is demonstrated by Porter and Brown (1991) that, nation-state actors are not the only actors that play important roles in global environmental politics. They continue that the state bargains with the donor states that exert influence through aids programs and donations to multilateral banks. The study establishes that, every village was given Tanzanian shillings 3,350,000 (Approximately 1,675 euros) in October 2011, 2,200,000 (approximately 1,125 euros) in April 2012. In Likuyusekamaganga village, the funds were used to purchase a gun for hunting quotas allocated to them and the gun would be used for anti-poaching and handling of ruinous animals on their farms. The study also established that the funds were used for purchasing office furniture and facilitation of other village administration activities. Also in the case of the SNTFCA, the State and the Selous – Niassa Wildlife Corridor Protection project (a KfW funded project) displayed a very close working relationship. The state allowed and released areas for KfW to construct new office buildings. KfW provided iron sheets, local people had to work on making bricks. Now there is a new office building in each of the seven villages forming the WMA. Still on the role and power of funding, Levine (2002) argues that NGO involvement as an alternative to the state, and the consequent injection of substantial development funding into NGO programs where funding become available substantiate the neoliberal development agenda through conservation. The study establishes that all major material benefits as claimed by the WMA management relies on donor and NGOs funding the question which is addressed by Van der Duim *et al.*, (2011) that these kind of projects that heavily rely on donors and NGOs funding stands a danger of collapsing after funding dries. In the case of SNTFCA the challenges of lack of funds and the danger of the conservation project to collapse as argued by Van der Duim *et al.*, (2011) has already shown some signs as substantiated by the finding that the State with the help of conservation NGOs are supposed to make sure that sensitization visits to the villages about the importance of conserving the corridor are made at least every month but the lack of facilities and funds made the exercise to take place slowly³⁰.

³⁰ Information obtained from an interview with the Game Unit representative

This study also addresses that the benefits resulting from the revenue sharing and sponsorship are seen almost nine (9) years after the establishment of the wildlife corridor and the logical question is if TFCA are meant to improve their socio-economic status of poor people living on the edges of the SNTFCA. The study also establishes that these benefits are at the community level and not that every villager (individually) accesses them. Few villagers who belong to the WMA and the village natural resource conservation committees know about their existence³¹. Other villagers claim that, they are still waiting for the promises of improving their livelihoods otherwise as it stands it is better for them to be allowed to access the fertile land for farming that would bring benefit that is more material³². The study establishes that if it took almost 9 nine years to realise the benefits in form of 1 tractor, office building to every village etc. the benefits that local people claim that they are nor accessed by the community rather only few members how long will it take for all villagers to realise the benefits of the establishment of the wildlife corridor and what next is to brought in as part of benefits?

5.3.3 Analysis of established costs

Local people claim that they they are still waiting for the promises of improving their livelihoods otherwise as it stands it is better for them to be allowed to access the fertile land for farming that would bring benefit that is more material³³. Local people claim that things like a tractor are there but they do know how each of them will make use of it; the same applies to the new office building etc. Local people perceive the established benefits as only meant for WMA management, the very management that is also accused by local people for not being open in management especially on the funds use and management. The study establishes that measures related to restrictions to access to fertile land for small-scale agriculture, domestic fuel, and firewood's as are major concerns (cost) to local people³⁴.

³¹ Information obtained from one-on-one interview with local people

³² Information obtained from a focus group discussion with the village natural resources conservation committee

³³ Information obtained from a focus group discussion with the village council

³⁴ Information obtained from one-on-one interview with local people

To local people, facilitation of their lives is important than conserving a large area where they are restricted to access resources like charcoal and firewood. Local people count on the wildlife corridor as a very fertile area and that it would be more beneficial to them if they would be allowed to practice agriculture. Local people claim that they just hear from the village talks (seminars) organised by the WMA management and game office unit on the importance of conserving the corridor but they still do not see the direct benefits to them³⁵. I link this situation to Adam and Hutton (2007) who claims that in neoliberal condition protected areas aligned with other major projects imposed by the state in partnership with international organisations has the capacity to deliver significant public goals but also to impose significant local costs. In this study, the conservation of the wildlife corridor which reflect the work of international conservation NGOs interests is an opportunity cost to local people whom their livelihoods matters than seeing the forests and trees grows in the corridor allowing for animals habitat and passage. Buscher (2009) also explains that TFCAs formation encompass many actors; cover large spaces and unleash contradictions and struggles on wholly new scales and that one of the objectives of TFCA formation is uplifting livelihoods of rural people. In this study, we saw that there are struggles between local people who threaten to go back in the wildlife corridor for agricultural activities as opposes to the state and NGOs interests of conserving the corridor as a habitat and passage of wild animals. Buscher (2009) also warns in TFCAs formation it is not necessarily that the promised benefits will be delivered in neoliberalism condition. The promises are often used as a way to open up local people to participate in conservation activities that are behind conservation NGOs interests. It was established that, slow materialisation of the promises expected by local people made them angry and threatened to go back and encroach the areas set aside for protection of the wildlife corridor³⁶. This finding demonstrates that local people see the interests of conservation by the State and NGOs being given more attention while efforts to ensure that the objective of uplifting local people livelihoods is not given a priority.

³⁵ Information obtained in one-on-one interview with local people

³⁶ Information obtained in a focus group discussion with the village natural resources conservation committee

The study established that the easier way to deal and get local people on board is through ensuring that material benefits do not take too long to materialise. If it means constructing infrastructures then let the process not be too elongated as substantiated by, the Selous - Niassa Wildlife Corridor Protection management and that if involved actors in conservation manage to fasten the materialisation of tangible benefits to local people then they will manage to handle and manage local people to meet the goals of the TFCA establishment³⁷.

5.4 Other Conservation Disputes

The study also poaching issues and illegal logging issues in the wildlife corridor as a contested issue between local people and the WMA, Game Unit and the District management. During interviews with local people through their village natural resources conservation committee and the interview with the representative from the Game Officer Unit, the recurring problem in relation to the management of the wildlife problem was poaching and that attempts to control the problem was at the verge of a failure unless the government put more efforts in it. PAMS Foundation and Game Frontiers of Tanzania are the only actors in line with the State in dealing with poaching activities. PAMS Foundation provides anti-poaching equipment to include; uniforms, cameras, spectacles, camping gears³⁸. Game Frontiers of Tanzania a tourism company holding two hunting blocks in the WMA also with efforts to handle poaching activities now owns an anti-poaching team. The company reported that, recently the anti-poaching team managed to get hold of 15 elephant tusks and guns (rifles) from poachers³⁹. An interview with the village game scouts claimed that poachers used heavy fighting machines like war weapons. They also believe that there must be wealthy persons behind the puzzle of poaching⁴⁰. The puzzles about poaching did not find any clue. The main questions remain to be who is behind poaching? Who is telling the truth about poaching? Is it local people, rangers and village game scouts who believe that there are wealth and people with authorities behind it?

³⁷ Information obtained from one-on-one interview with the representative from SNWCP management

³⁸ Information obtained from a focus group discussion with rangers

³⁹ Information obtained from an interview with the company representative

⁴⁰ Information obtained from focus group discussion with village game scouts.

Are they local people revealing their anger by poaching the resources as part of costs offsetting the expected benefits? Local people claimed that the management at the district level victimizes that they are the ones concerned with poaching activities. Another conservation dispute exposed by the study is related to illegal logging. Local people claim that may be there is a hidden agenda with illegal logging. Local people accuses the district management official that manages the anti-poaching unit for the reason that when they seize illegal products like timber and even vehicles with timber it surprises them because the next day the vehicles are released after being handled over to the relevant bodies for legal procedures. On these contradictions, local people claim that may be illegal activities are planned and sponsored by wealth people within the authorities⁴¹.



Figure 10: A group of rangers with seized elephant tusks

Source: PAMS Foundation (2013)

⁴¹ Information obtained from a focus group discussion with rangers

6. RESEARCH OVERVIEW, DISCUSSION & CONCLUSIONS, LESSONS LEARNED AND RECOMMENDATIONS

6.1 Overview of the research

The study about local people perceived costs and benefits because of their living on the edges of the wildlife corridor that forms the Selous – Niassa Trans-frontier Conservation Area was conducted in Likuyusekamaganga village in Mbarangandu Wildlife Management Area in Ruvuma region Tanzania in a period between December 2012 and January 2013. The study used political ecology framework to examine the perceived benefits and costs. In this study, 3 aspects related to political ecology framework were used as a platform to establish the perceived benefits and costs. These aspects are issues related to: access and use of resources; participation and decision-making regarding resource access and use and distribution of benefits and costs from conservation of the wildlife corridor. The findings of this study incorporate views from 34 respondents captured by the use of semi-structured interview schedules, focus group discussions, observations and secondary data review. Information from the Selous NiassaTrans Frontier Conservation Area website was also used to frame the study findings.

The study established that issues related to access and use of resources in the wildlife corridor accompanied with lack of full participation of local people in decision making regarding resource use and denial of access to the land for rice growing has led to conservation disputes where on one side local people see the corridor as a fertile land where agriculture practice would yield more substantial benefits as opposed to the State and international non-governmental conservation organisations that aim at conserving the corridor. Uranium mining dispute is also distinguished in this study. The study elaborates on campaigns against uranium mining by international non-governmental conservation organisations and human rights organisations at the national level that went against the State and proved unsuccessfully. Currently, the Mbarangandu WMA area of about 200km² is now used for uranium mining. The study also reveals complexities in issues related to transparency in funds use and distribution, selection and contract signing processes with investors.

Local people claims that things are done and implemented though their WMA management that do not inform them in details and also the processes of selecting the investor and signing of contact ends at the District level.

The study also establishes that there benefits are at the community level to include a tractor, a new office building, a container used as a storeroom. The claims is that not that every villager (individually) accesses them. Villagers claim that, they are still waiting for the promises of improving their livelihoods otherwise as it stands it is better for them to be allowed to access the fertile land for farming that would bring more benefits that are direct. The study summarises that the SNTFCA establishment is a conservation discourse that considers community as homogeneous and a claim that Trans frontier conservation areas formation as a conservation strategy addresses the socio-economic interests of local people needs to critically be addressed by the Tanzania government and the international non-governmental conservation organisations involved in Selous – Niassa Trans Frontier Conservation Area.

6.2 Reflection on the use of the political ecology theoretical framework

6.2.1 Usefulness of the use of political ecology framework in this study

The intention of the study was to establish benefits and costs of local people as a result of their living on the edges of the wildlife corridor that forms the SNTFCA. The political ecology framework was useful in this study from the fact that it is the political ecology framework that helped to point out at the roles of the state, NGOs and local people in conservation of natural resources, the very roles and interests that determine the costs and benefits distribution. Using political ecology I managed to establish and understand decisions that communities make about the natural environment in the context of their political environment, economic pressure, and societal regulations as also argued by O'Rourke (2004). Examples of the decisions by local people is that as long as they saw no direct benefits as a result of the wildlife corridor conservation, they would go and access the fertile land for rice growing. In the same line, the study also managed to establish the roles and rights of local people in natural resources conservation.

As established by this study, local people in Likuyusekamaganga village proclaims that they are the legitimate owners of the resources and they see the benefits like construction of office buildings, a tractor, revenue sharing to mention a few as belonging to few people who belong to the management of the WMA and the district level. Local people affirm their right of participation in decision-making is denied when they mention issues like lack of transparency in issues like funds use.

Issues related to lack of transparency in natural resources management in Tanzania were also established as also established by Brockington (2007) whose study about forests, community conservation, and local government performance in Babati and Rukwa regions in Tanzania found that there was no transparency over the use of funds, and there were many indicators that the funds were not used as stated in the village reports. In summary, local people claim that conservation NGOs colludes with the WMA management and the District management to make decisions and they gave example on the processes of selection of investors and contract signing. In fact, the study establishes that local people value going back to the corridor for things like agriculture that would benefit them at personal level. I link the claim that local people would go back to encroach the wildlife corridor to Watts (2000) who argue that political ecology provides the tools for thinking about the conflicts and struggles as created by the forms of access to and control over resources.

The framework was also useful in this study from the fact that political ecology is attentive to the power relations characteristic in defining, controlling, and managing nature (Bryant, 1998); furthermore, it takes note of a multitude of actors (Escobar, 2006) and examines the impacts of their activities in nature conservation. In fact, political ecology has supported this study by helping to analyze that in conservation, a discourse win-win as claimed by the state and conservation NGOs reflecting that communities are set to benefit fits the interests of powerful international conservation groups whose main focus is on wildlife and biodiversity conservation and who tend not to trust the interests and knowledge of local communities in achieving set conservation goals.

6.2.2 Critiques of political ecology from the study experiences

I acknowledge that political ecology may be used to inform policymakers and organizations of the complexities surrounding environment and development, thereby contributing to better environmental governance Bebbington *et al.*, (2013) and also political ecology helps in looking at how unequal relations in and among societies affect the natural environment, especially in context of government policy (Robbins 2011). The study established that local people are represented through their WMA management and the village natural resource conservation committee made of 5 members. The Wildlife Policy (1998) approved the formation of natural resource conservation committees. Given such scenarios the challenge is what would be the role of political ecology in policy changing if the formation of the bodies representing local people may be priority be determined either by the state, any other organisation or institution under political influence. In fact, political ecology in this study revealed that there is differentiation in power dynamics between local people, the State, and international conservation NGOs but is this framework capable for policy changing in a situation where and as in Tanzania where representation is through the village council, district council, regional and from the political view, we have ward council and district council the bodies into which their formation may be based on certain interest and may be formed under political influences?

In this study, I ended up discussing issues majorly related to land accessing issues and its resources. The costs to local people in this study were the lack of access to the use of the corridor land for rice growing and at the same time, they did not see the benefits of conservation. The main threat also to the management was a threat that local people would go back and encroach the corridor and its resources. The problems related to lack of a say in participation and decision making in benefits and costs distribution comes as a supplement to the major problem of lack of access to the land for rice growing. Bryant (1998) argues that political ecology needs to go beyond the land centrism that has characterized most of the work done so far under its name the same applied to my study. In my own view, I would consider including a supplement of examining the role of policies that govern the establishment of the conservation areas (TFCAs as an example) for the purposes of establishing if real these policies are respected and adhered to.

I imagine that the strategies proposed by the Tanzania Wildlife Policy of 1998 are neither respected nor adhered to by actors operating in the wildlife corridor that forms the SNTFCA. The policy outlines all procedures and the rights of local people. Regardless of its existence, other actors in terms of decision-making and decisions with regard to benefits distribution bypass local people who are legitimate owners of resources. I remain in puzzle wondering how has the policy remained silent and who is responsible to help local people to raise their voices? Walker (2006) supports my argument by arguing that virtually all political ecology research has policy relevance, but policy relevance alone does not mean the research is used effectively, or appropriately. I insist that it is studies like this that need to point out issues regarding policies that may probably influence putting into consideration the use of policies that when read assures local people of their positions and power in conservation industry thus a call for a political ecology framework to include a component that would raise a voice on policy implementations in conservation industry.

6.3 Discussions and Conclusions on the main issues of the study

6.3.1 Access and use of the corridor resources

The study established that the issues related to access and use of the resources in the corridor are determined by the state in cooperation with the international NGOs where local people feel that they would make better use of the corridor by being allowed to execute substantial activities like agriculture. Information obtained from the Game Unit (State representative) is that local people in the Likuyusekamaganga village are poor and they see the corridor as the best platform to make their livelihoods and this has resulted conflicts between conservation and agriculture. The study also established that issues related to the conduct of illegal logging, encroachment of the wildlife corridor for things like charcoal and firewood were the main threat towards managing the corridor. The existence of such threats and poaching substantiates the role of the Game Unit (anti-poaching unit) which is supported by NGOs like PAMS Foundation and The Game Frontiers of Tanzania (the only tourism investor in the WMA). The presence of all these scenarios justifies that it is the State in alignment with international NGOs that determines the access and use of resources.

Local people are seen as a threat to the existence and survival of the wildlife corridor and its resources. The findings are in line with Duffy (2006) who explain the role of nation-states and global environmental NGOs in conservation does not take account of the full range of actors that affects the implementation of global environmental governance. In this study local people seems to have no influence in issues related to determining the access and use of resources in the wildlife corridor. In addition, the responses from some interest groups, such as communities, demonstrate that global environmental governance in the form of TFCAs may not be the most effective way of managing Trans Boundary environmental problems. Forsyth (2002) claims that, approaches in conservation and I refer to TFCA in this case that they are the result of political forces behind different accounts of “ecology” as representation of biophysical reality supported by science (Robbins, 2004) where the role of local people is rendered silent. These political forces result into unequal power relationship on managing the environment where Bryant (1998) affirms that it is probably the manifestation of the intervention of the first-world dominated system that leads to transformation of livelihoods of the local people in the areas where resources are found. I agree with Noe (2010) that local people had to relocate to allow for the formation of WMAs that in turn formed the wildlife corridor is a substantial cost of local people in Likuyusekamaganga village because their relocation has not paid off so far as established in this study.

Most of NGOs working in the SNTFCA are from the first world and that probably with no doubt Vayda & Walters (1999) explains that these areas are protected because of their economic values benefiting wealth first-world originating NGOs and investors. No wonder that also in the case of the Likuyusekamaganga village in the SNTFCA the expectations of local people are slow to materialize the situation that resulted into local people threatening going back to the wildlife corridor for practicing agriculture, I conclude that if they had benefited they would be the first to protect the corridor from encroachment, but the reverse is the contemporary situation. The finding that there are conflicts regarding access and use of the land matches the claims by Neumann 1992; Neumann 1997 and Nelson & Makko 2005 on the resistances of local people of northern Tanzania against foreign dominated conservation strategies in Mt. Meru area, Serengeti and Loliondo areas. Jewitt, (2008) concludes that as the specific circumstances that result in resource access and use conflicts are often strongly rooted in local history and social relations, as well as being connected to wider economic and power relations, political ecology’s multi-scale approach can be very helpful

for generating different layers of analysis, starting from a very local level and working upwards to a more regional understanding of the problem. I conclude that indeed, studies like this are needed to expose contemporary situations in conservation areas with a vision that things may change when the State and NGOs realizes that they need to listen and decide together with local people.

6.3.2 Participation and decision making regarding resource management and use

The study established that local people claimed to have been bypassed by the state and other actors in making decisions regarding resource use and management. The study established complexities in local people participation in issues like transparency in funds distribution where they claim to receive the funds without details from the WMA management the same also applies in issues related to signing of contracts with the investor and participation in selecting investors. Issues related to lack of transparency in natural resources management in Tanzania were also established by Brockington (2007) whose study about forests, community conservation, and local government performance in Babati and Rukwa region found that there was no transparency over the use of funds, and there were many indicators that the funds were not used the same as also established by this study. The study also establishes that local people faced difficulties in handling ruinous animals where they say the WMA and District management involves a lot of bureaucracy before handling the problems that was supposed to be quick as sometimes-ruinous animals threatens not only crops but also their lives. The study also establishes that the restrictions of local people to access and use the wildlife corridor for agricultural activities, collection of charcoal and firewood created a tension between local people, the WMA management and a feeling that they are not given attention and a chance to be heard by the state about their concerns.

Vedeld (2002) warns that local participation can be seen as strategy of devolution of authority and power, resources, distribution of rights and duties from state to local levels of governance and from public to civil society but it could also be a fact that governments and NGOs realise the need for local participation but probably they also fear it because a larger involvement is less controllable, less precise and so likely to slow down planning processes.

Different organisations interests like conservation, mining, and tourism business may render the role of local people silent as argued by Andersson *et al.*, (2012) and if this is the case I question the extent to which the abilities and willingness of different actors interest at SNTFCA are willing to understand the needs of local people by giving a room to local people to speak out their concerns. Vedeld (2002) also argues that an acceptance that local participation is about facilitating a long term process of social change; where actors with conflicting interests have to co-operate through existing local institutions and arenas may not be a factual one. When I link this fact I also question if in the neoliberal condition (Duffield 2007) where donor governments, international financial institutions, United Nation agencies and Non-Governmental Organisations exercise significant control over the design and delivery of economic and welfare functions of the state will real be willing to cooperate with local people.

On the other side, I align with Duffield (2007) that may be side-lining local people in issues related to making decision regarding resource use in the wildlife corridor may be the result of growing importance of neoliberal approaches to conservation is the growing involvement of the private sector in the tenure and management of protected areas, raising complex issues of rights, ownership, governance and legitimacy. In line with (Hufty 2008) I argue that the processes of involving local people in decision making must not be a consultative participatory process where people are consulted and listened to, but the problems and solutions are externally defined. The state and other actors have to realise that their success it depends very much not on the good will of a few people rather all who stands a chance to influence the management of the wildlife corridor and I conclude that conflicts between conservation and agriculture where local people see agriculture practising in the corridor to be more beneficial as compared to conservation can be mitigated by enhancing local participation.

6.3.3 Costs and benefits distribution

The study established that after almost nine (9) years of its establishment, the wildlife corridor as part of benefits own a tractor, an on-going new office building with a conference center, an armory room, a vehicle for office operation, and a motor cycle. Other benefits at the community level include water dams' construction, training of village game scouts where every village has fourteen (14) positions, benefits from training and facilitation into undertaking alternative income generation activities like beekeeping. There are also other benefits at community level to include construction of school classrooms and bursaries for orphans.

Local people claim that these benefits do not benefit everyone in the community. Local people mentioned costs associated with the establishment of the wildlife corridor to include loss of access to fertile land for agriculture, denied access to collect domestic fuel in form of charcoal and firewood, ruinous wild animals that threaten their lives and destroy their crops on their farms. In fact, local people favor to regain their traditional uses of the wildlife corridor to include accessing it as an agricultural land. This finding is related to the argument by Gillingham and Lee (1999) that access to conservation-related benefits can positively influence local attitudes and if benefits are perceived as small in relation to losses or inequitably distributed, they may not achieve this required effect. Local people in Likuyusekamaganga village claim that it is only few people who benefit from the existence of the wildlife corridor and they claim that the benefits mentioned are at the community level, to them individual benefits would make more impact.

The fact that local people favour and would want benefits at personal level is also linked to the claim by Vedeld (2002) that local people may probably not be interested in biodiversity nor do they see wildlife and possible incomes from as part of their life mode or as part of what they do for a living. Their attitude could be that cultivating farmland, harvesting in the forest, building roads and schools is development. In addition, that, whatever benefits are transferred to local people, they will always be low, compared to the substantial costs of local people of having conservation areas and wildlife close to homes and crops.

That protected areas aligned with other major projects imposed by the state in partnership with international organisations has the capacity to deliver significant public goals but also to impose significant local costs as marked by Adams & Hutton (2007). In line with Andersson *et al.*, (2012) I conclude that in order for people on the edges of TFCAs to meaningful participate in their own future on the protected areas edges they must be assures that the benefits of living on the edges are outweighed by the costs. This would help in enhancing local people as also argued by Fabricius *et al.*, (2013) not to draw out of from management process and invoke various forms of sanctions - refusing responsibility for consequences of non-involvement, boycotting management processes or even actively sabotaging attempts by other stakeholders to manage the resources. Otherwise, as it is in Likuyusekamaganga village, the conflicts concerning the wildlife corridor encroachment may not have a possible solution unless people proof conservation of the corridor benefits them.

6.4 Lessons learned

I organize lessons that can be learned from the study in accordance to issues related to conservation and local people participation in natural resources management and at large I relate the lessons that can be learned with reference to access, use and local people participation in distribution of benefits and costs from conservation of the corridor.

Local people are restricted from accessing and use the resources in the wildlife corridor for their traditional way of life making where they claim that it is only few people who benefit and that they are largely bypassed by the state and international conservation NGOs. I assert that conservation attempts in Tanzania still use the fortress-based approach where the state and her allies in conservation enforce their interests. Also, the legacy of colonialism remains strong in managing the wildlife corridor as reflected by global interest of nature and conservation policies as depicted in the roles of international conservation NGOs in managing the wildlife corridor. The study shows the strong influence of the German Development Bank (KfW) on the Selous - Niassa Wildlife Corridor Protection project. The presence of 8 international NGOs conservations organisations (Table 1) also supports me to alarm the expansion neoliberalism in nature conservation. In general, the use of political ecology theoretical framework in this study helps me to establish and learn that the presence of international NGOs in conserving the corridor and their interest are fundamentally political and their presence is not necessarily meant to benefit local people.

The existence of the wildlife corridor is not a true local community driven process. If it had been a true local community driven process then local people would not have expressed the feelings of being bypassed in making decisions with regard to access, use and distribution of benefits and costs.

I also insist and it has to be learned that TFCAs establishment and management as a conservation intervention does not that much differ from the community based natural resources management (CBNRM) approach. Like CBNRM, TFCAs use a top-down approach where the control on access and use of resources claimed to be conserved by the State and the conservation NGOs bypasses local people.

This study has established how theoretically local people are subject to benefit from the TFCAs establishments but in reality, the benefits are so contentious and cannot be generalised by using the term “community” from the fact that communities are not a single entity as may be claimed in conservation discourses.

From the study findings, it can also be learned that the participatory policies in creating and facilitating the management of natural resources have remained a mirage rather than a reality. There is also a lack of coherency between national policy and the promise of poverty relief and livelihood support. I also claim that tangible benefits that are promised by conservation bodies remain to be questionable in such situations where for example how can local people eradicate poverty yet they have no chance to influence any of the decisions regarding resource access, use and the distribution of benefits and costs of conservation. In addition, how do local people benefit if local people are disregarded in terms of actual needs? E.g., local people demand the land for rice growing while the state and international conservation NGOs denying them a chance.

The study help me to establish that environmental management involves a variety of actors’ to include local people who have differing interests in areas set aside for conservation. In addition, that conservation discourse tends to treat local communities as a single entity. When talking of the benefits in Likuyusekamaganga village the WMA and the state describes the benefits as reaching every individual in the society, as opposed to local people who argues

that not every one benefit. It is also that the extent to which people do benefit differs. When I think of the benefits in form of training where village game scouts are trained it sounds as if majority of local people are trained and employed for anti-poaching activities just to find that every village has only fourteen (14) positions. I establish that local communities are thus heterogeneous in line with Vedeld (2002) who claim that local people in communities tend to differ in terms of what they do for a living, what kind of resources they have access to, in the culture they are brought up and in socio-economic and cultural respects. Not all local people own land nor manage natural resources; they may work as teachers, as private operators etc., with no or little interest in contact with biodiversity management and that these differences may result into conflicts regarding access and use of resources.

Thus an assumption and the use of discourses that ‘the community’ is willing to participate in conservation or is benefitting or not benefitting from conservation needs to be addressed more critically by considering who is involved and to what extent.

6.5 Recommendations

6.5.1 To the State and Conservation NGOs

Concerning access, use, participations and decision making with regard to distribution of benefits and costs and in line with Quinn *et al.*, (2012) I recommend to the State and conservation NGOs to acknowledge that the fundamental key to success or failure of their programs in conservation is communication, both internal and external. The state and conservation NGOs must realise that the support base from local community will not grow without communication excellence by a variety of means, reporting on outcomes, successes and values to individuals and communities included in these programs. I imagine that reporting on the outcomes of the management and development of the wildlife corridor will help in drawing attention of local people and it may help to clear the doubts in problems like funds use and sharing. Local people also affirmed to not know anything about the prospects of the wildlife corridor management thus remain to be stagnant on supporting the existence of the wildlife corridor. Proper communication with evidences of positive and assurance by delivering the promised benefits may help in getting local people aboard.

I also recommend to the State and the conservation NGOs to realise the perspectives of participation and apply both of them in managing the wildlife corridor and its resources. In this case I bring in the argument by Mannigel (2008) who describes two predominant perspectives for participatory approaches in conservation strategies i.e. participation as a *means* and participation as an *end*. Although the two strategies are difficult to separate, Mannigel (2008) argues that in the former, participatory strategies are used to ensure sustainable changes in management, while the latter sees participation as essential for equity and empowerment. The State and conservation NGOs need to realise that when participation is used as a means, involving people becomes a way to acquire their support for conservation endeavour as also argued by Wells and Brandon (1993) and that it is through acquiring local people support that may lead to achieving the goals of conservation.

I imagine that support may come as a result of the settling of issues related to access and use of resources and largely equal sharing of benefits and minimisations of costs of conservation to local people.

6.5.2 Future research

Concerning this study, I have one major recommendation and this is to conduct the same study using political ecology theoretical framework in other villages from both countries (Tanzania and Mozambique) for the purposes of establishing the contemporary situation in the SNTFCA, the largest trans-boundary ecosystem in Africa covering about 150,000 km². I recommend broadening the study area for the reasons that management of the largest trans-boundary ecosystem in Africa may necessarily need a proper, clear identification and a platform to contain the interest of all parties involved in conservation of the corridor. This study was only done in one village that questions scaling – up the findings. The study to incorporate more villages may draw a collective situation about the contemporary situation and what can be done in future for conservation sustainability. I strongly argue that in line with Neumann (1992) that unless we find ways to meet conservationist goals without harming the interests of local people, conservation cannot succeed.

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SOURCE OF PHOTOS ON THE COVER PAGE:

- i. The photo with elephants used with authorisation from the Mbarang'andu WMA website: www.twma.co.tz/wma/mbarangandu.
- ii. The photo with traditional houses was taken from the field during the study.

8. APPENDICES

Appendix 1: Categories of respondents and dates of interviews and focus group discussions

S/N	Categories of respondents	Number of respondents	Method of data collection used	Dates of interviews
1	Mbarang'andu WMA Management	2	TWO One - on - one interview	06/12/2012
2	Selous Niassa Wildlife Corridor Management Project Management	1	One - on - one interview	10/12/2012
3	Game Officers	1	One - on - one interview	11/12/2012
4	Game Frontiers of Tanzania (Tourism Company)	1	One - on - one interview	12/12/2012
5	Village Game Scouts	5	Focus Group Discussion	13/12/2013
6	Rangers	4	Focus Group Discussion	14/12/2012
7	Residents of Likuyusekamaganga village (Local people)	20	10 - Focus Group Discussion in the following distribution <ul style="list-style-type: none"> • 5 members from the village 	19/12/2012

			management	
			<ul style="list-style-type: none"> 5 members from the village conservation committee 	
			10 - One - on - one interview in the following distribution.	
			1	20/12/2012
			2	21/12/2012
			3	22/12/2012
			2	27/12/2012
			2	28/12/2012
	Total	34		

Appendix 2: Interview Questions

1. LOCAL PEOPLE :VILLAGE LEADERS AND VILLAGERS

a) LOCAL PEOPLE AND MBARANG'ANDU WMA ESTABLISHMENT

- i. Can you tell how you came to live in this village?
- ii. Are you aware that your village is among the villages making up the Mbarang'andu WMA?
- iii. Can you explain how the Mbarang'andu WMA was formed?
- iv. What did it require for it to be formed?
- v. What role (s) did your community play during establishment of the WMA?
- vi. What do you think of the WMA? Please explain
- vii. How the establishment of the WMA does affect your life?

b) LOCAL PEOPLE ON THE USHOROBA FORMATION AND RESOURCE USE

- i. The combination of areas formed by WMAs forms the USHOROBA. Can you please explain:
 - How did the process take place?
 - The reasons for the establishment of the USHOROBA, either by being informed by the government, NGOs or conservation organisation or if you happen to be there during formation process
- ii. Is there free access of resources in the USHOROBA? If YES, how do you describe the access? If NO explain how you are limited from accessing them and what do you do.
- iii. Can you tell who controls resource use in the USHOROBA and how does it take place?

c) LOCAL PEOPLE PARTICIPATION AND DECISION MAKING IN THE USHOROBA MANAGEMENT AND RESOURCE USE

- i. Are you aware of how the decision-making process regarding the management of the USHOROBA takes place?
- ii. Who is involved in the decision making process in managing the USHOROBA and what roles of these organisations involved in managing the USHOROBA?
- iii. How do you (in person/your community) participate in decision making towards managing the USHOROBA?
- iv. How do you make sure that your concerns are heard and acted upon by those involved in decision-making?
- v. Do you have evidences that your concerns are heard and implemented the way you prefer? If YES, please explain how do you do it. If NO what and whom do you think, has more authority and whether satisfied or not decisions made most of the time follows their will.

d) LOCAL PEOPLE AND THEIR COSTS AND BENEFITS FOR BEING INCLUDED IN THE USHOROBA

- i. What are the resources present in the USHOROBA and you know for sure that they are important in your daily life?
- ii. Do you think that in anyway, your participation in the USHOROBA management and resource use has benefited you? If YES above, please explain and mention what you see are the benefits of your participation in the USHOROBA management. If NO, what do you think are the costs related to your involvement in the USHOROBA management and the current setting of resource use?
- iii. Are you satisfied with the current setting of resource use in the USHOROBA?
- iv. Do you think that the USHOROBA should be used for any purpose other than for the protection of wildlife? Please explain the reasons for your answer.
- v. Does living next to the USHOROBA cause problems for people in the villages along its borders? Please explain the reasons for your answer.

2. GOVERNMENT OFFICIALS: (MINISTRY OF NATURAL RESOURCES AND TOURISM-WILDLIFE DIVISION STAFFS)

a) THE GOVERNMENT AND THE FORMATION OF THE WMA

- i. Can you explain how the Mbarang'andu WMA was formed?
- ii. What did it require for it to be formed?
- iii. Was it an open area not occupied by then?
- iv. What role (s) did the government play during establishment of the WMA?
- v. How were communities, NGOs, and other conservation organisation (if any) involved in the formation of the WMA? To what extent? Please explain.

b) THE GOVERNMENT IN THE USHOROBA FORMATION AND RESOURCE USE

- i. Can you tell how was the USHOROBA formed?
- ii. Are you aware of the reasons for the establishment of the USHOROBA?
- iii. Can you explain the ways into which the government used to make sure that the process of establishing the USHOROBA is success?
- iv. How do you arrive at making sure that the areas in target are entangled in the USHOROBA?
- v. Are there systems of making sure that the resources are well utilised and that the government control access and use without complains from other actors involved in the management of the USHOROBA?
- vi. If you got a chance, what would you propose to the government to ensure smooth management of the USHOROBA and the resources in it?

c) THE GOVERNMENT IN ACTORS PARTICIPATION AND DECISION MAKING PROCESS

- i. What does the Ministry of Natural Resources and Tourism - Department of Wildlife do for the people and other actors involved in the USHOROBA?
- ii. What is the governments' role in making sure that there is a fair participation and decision-making process in the management of the USHOROBA and its resources?
- iii. In what ways do the government enhance a fair decision making process where all actors have equal chances?
- iv. To what extent has, the government managed to develop a platform where actors come together and make decisions.
- v. What are the roles of NGOs and other conservation organisation (if any) in the decision-making processes? What influence do they have?
- vi. Are there evidences that most of the time the government concerns are heard and implemented by other actors the way you prefer? If YES, please explain how do you do it. If NO what and whom do you think has more power of influence and decides for you regardless of whether you are satisfied or not.

d) THE COSTS AND BENEFITS OF THE GOVERNMENT INVOLVEMENT IN THE USHOROBA ESTABLISHMENT AND MANAGEMENT

- i. What the costs and benefits of your organisation involvement in the establishment and management of the USHOROBA?
- ii. Are there problems that are the result of integrating local people land in the USHOROBA formation and management? How do you handle them?

3. NON-GOVERNMENTAL OFFICIALS: NGOS (REPRESENTATIVES OF NGOS)

a) NGOs AND THE WMA FORMATION

- i. Do you know anything about the existence of the Mbarang'andu WMA?
- ii. Can you explain on how the WMAs are being established?
- iii. What are the ways that your organisation uses to facilitate formation and management of WMAs and their resources?
- iv. What roles does your organisation play in the running of the Mbarang'andu WMA?

b) NGOs AND RESOURCE USE AND MANAGEMENT IN THE USHOROBA

- i. Why and how is your organization involved in developing and daily management of the USHOROBA?
- ii. How is your organization involved in developing and daily management of the USHOROBA? What does your organization do?
- iii. What are the roles of others (local people, the government, other conservation organizations etc.) in natural resource access and use in the USHOROBA? Is there free access for those in need of the resources? Is there control? Who controls the processes?
- iv. If you would get a chance, what would you propose to your organization and other organizations who are involved to ensure smooth management of the USHOROBA and the resources?

c) NGOs IN PARTICIPATION AND DECISION MAKING PROCESSES IN THE USHOROBA

- i. What is the organisations' role in making sure that there is just participation and decision making process in the management of the USHOROBA?
- ii. Who are your collaborators in making decisions towards access and control of resources? Who is the most important that you would always need the support before making decisions?
- iii. In what ways does your organisation enhance decision-making process in terms of resource access and control in the USHOROBA?
- iv. What are the roles of local people, the government, and other conservation organisations in making sure that decisions making process is well channelled and acted upon effectively?

d) NGOs' COSTS AND BENEFITS IN THE MANAGEMENT AND RESOURCE USE IN THE USHOROBA

- i. What are the costs and benefits of your organization involvement in the establishment and management of the USHOROBA?
- ii. To what extent are local people and the government supported to make sure that their voices are channelled, and acted upon effectively?
- iii. What problems have they resulted following integrating local people land in USHOROBA formation and management? How do you handle them?